
TITLE 327 WATER POLLUTION CONTROL BOARD**SECOND NOTICE OF COMMENT PERIOD**

LSA Document #09-615

DEVELOPMENT OF NEW RULES AT [327 IAC 19](#) CONCERNING CONFINED FEEDING OPERATIONS**PURPOSE OF NOTICE**

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for new rules at [327 IAC 19](#) concerning confined feeding operations (CFO). By this notice, IDEM is soliciting public comment on the draft rule language. IDEM seeks comment on the affected citations listed and any other provisions of Title 327 that may be affected by this rulemaking.

HISTORY

First Notice of Comment Period: August 19, 2009, Indiana Register ([20090819-IR-327090615FNA](#)).

CITATIONS AFFECTED: [327 IAC 16](#); [327 IAC 19](#).

AUTHORITY: [IC 13-14-8](#); [IC 13-18-10](#); [IC 13-18-20](#).

SUBJECT MATTER AND BASIC PURPOSE OF RULEMAKING**Basic Purpose and Background**

Indiana has had a CFO program in place since 1971, prior to EPA's National Pollutant Discharge Elimination System (NPDES) program for CAFOs. After the federal rules under the Clean Water Act (CWA) were revised in 2003, the Indiana CFO statutes and rules were revised in 2004 to mesh the federal and state programs. With revisions to the federal rules in 2008, a new opportunity is being presented to reevaluate the state program, make changes that will better align the state and federal rules, and make it clearer what is expected from each. This rulemaking is being done in conjunction with LSA Document #09-213. LSA Document #09-213 is incorporating by reference the new federal NPDES CAFO rules and would allow owner/operators of facilities to self-certify that they do not propose to discharge. IDEM is currently planning to have the same effective date for these two rules in order to ensure administrative consistency and, if applicable, a smooth transition from the NPDES permit program to a CFO approval.

In this draft rule, IDEM is proposing to upgrade the requirements for all CFOs through a new rule at [327 IAC 19](#) that would replace existing rules that IDEM proposed to amend in the first notice of rulemaking published on August 19, 2009. The new rules will be more like the past requirements for large CAFOs that can now self-certify they do not propose to discharge and, therefore, are no longer required to have an NPDES permit. These changes will ensure the continued protection of human health and the environment in the state of Indiana.

[IC 13-18-10](#) provides IDEM statutory authority to require approval prior to the start of construction of a CFO or CAFO, as well as approval procedures and construction standards. [IC 13-18-20](#) contains the fees assessed for each facility that has an NPDES permit.

[IC 13-14-9-4](#) Identification of Restrictions and Requirements Not Imposed under Federal Law

The following elements of the draft rule impose either a restriction or a requirement on persons to whom the draft rule applies that is "not imposed under federal law":

All of draft article 19 is a requirement not imposed under federal law. However, regulation of CFOs is a requirement of state law. [IC 13-18-10](#) requires IDEM to grant an approval before any person may start construction of a CFO. Thus, CFOs have been regulated by the state of Indiana since 1971. Key aspects of the draft rule that represent changes to the current CFO rule include requiring all facilities to prepare and implement storm water pollution prevention plans (SWP3), requiring phosphorus based land application, and requiring annual manure testing. IDEM is adding these requirements in order to ensure that those facilities that choose to self-certify that they do not propose to discharge and, therefore, are no longer required to have an NPDES permit, maintain the same level of environmental protection under the new CFO rule. The potential fiscal impacts of these changes are listed below.

Potential Fiscal Impact

IDEM anticipates this rule will have a fiscal impact of greater than \$500,000. Most of the new requirements in the draft rule are currently required by the federal NPDES CAFO permit rule. Therefore, any CAFO facilities that choose to leave the NPDES permit program by self-certifying that they do not propose to discharge, and thus become subject to this rule, will incur no additional costs from this rulemaking. Below are parts of the draft rule that are anticipated to impose additional costs on the approximately 1,500 facilities in Indiana that are currently defined as CFOs:

(1) Phosphorus based land application. This could modestly increase costs for the regulated community.

Previously, land application of manure was based on soil nitrogen content. If soil phosphorus levels are

above the levels listed in the draft rule, it could limit the amount of acreage on which producers may land apply. IDEM does not anticipate that the effects of this new policy will be large since 75% of the land application area in Indiana is utilized by CAFOs, which have been using phosphorus as a limiting factor since 2006.

(2) Annual manure testing. This will modestly increase costs for the regulated community. The current CFO rule requires manure testing once every three years. This proposed change will add two manure tests in a three year cycle.

(3) Storm water pollution prevention plans (SWP3). This will modestly increase costs for the regulated community. Owner/operators may choose to develop the SWP3 themselves or have a contractor do it. Either way it will result in costs. These costs will be twofold: first in the form of man-hours used in order to initially develop the plan and then conducting routine inspections to determine if any changes need to be made; second in the form of monitoring and sampling storm water for sediment and nutrient loadings.

IDEM specifically requests comments on the proposed fiscal impact of the draft rules.

Public Participation and Workgroup Information

IDEM will establish a workgroup with representation from all interested persons to address the issues presented by this rulemaking. If you are interested in participating, please contact Lydia Kuykendal, Rules Development Branch, Office of Legal Counsel, (317) 234-5345, or (800) 451-6027 (in Indiana)

SUMMARY/RESPONSE TO COMMENTS FROM THE FIRST COMMENT PERIOD

IDEM requested public comment from August 19, 2009, through September 18, 2009, on alternative ways to achieve the purpose of the rule and suggestions for the development of draft rule language IDEM received comments from the following parties by the comment period deadline:

Hoosier Environmental Council (HEC)
Conservation Law Center (CLC)
The Sierra Club (SC)
Indiana Farm Bureau, Inc. (IFB)
Livestock and Poultry Rule Revision Group (LPRRG)
Gena Hartman (GH)
Randy Hartman (RH)
Jerry and Sharon Fox (JSF)
Mike and Barbara Artinian (MBA)
Dan and Carla McQueen (DCM)
Tony and Donna Talbert (TDT)
Mel Nobbe (MN)
Marge Hefner (MH)
Jauneta Stout (JS)
Barbara Sha Cox (BSC)

IDEM's General Approach

Comment: We recommend retaining both the General and Individual NPDES permit programs to give producers as many avenues as possible to enter or remain in the federal NPDES program if they so choose. (LPRRG, IFB)

Response: Under the new federal regulations, the general permit requirements will be almost identical to individual permit requirements with increased public participation in the review of application materials and site-specific permitting for acreage and nutrient management plans. The sources seeking a NPDES permit are more appropriately regulated under permits written for the individual designs and operating circumstances of each facility. Therefore IDEM is proposing to eliminate the CAFO general permit as a permitting option for CAFO NPDES sources.

Comment: We urge IDEM to maintain a separation between the CAFO NPDES regulatory program and the state authorized program under the confined feeding statutes. As a basic premise, all operations over the numbers outlined in [327 IAC 16-2-5](#) for a regulation under the confined feeding control law in [IC 13-18-10](#) are required to seek an approval from IDEM. That is separate from the authority that all operations which discharge or propose to discharge must obtain an NPDES permit authorized under the CWA. CWA requirements should not dictate what occurs under the state authorized program. (LPRRG, IFB)

Response: IDEM does not intend to join the CAFO NPDES program with the Indiana CFO program. Both entities will continue to be regulated under separate rules, with separate requirements.

Discussion of Alternatives

Comment: We agree that all livestock operations in Indiana not regulated under a revised NPDES program should be regulated by one rule. However, we believe the proposal to adopt the requirements of the current General NPDES Permit program and apply them to all animal feeding operations (AFOs) is not necessary. It would place an undue burden on many operations and does not provide any additional environmental benefit. (LPRRG, IFB)

Response: In general, IDEM agrees with this comment, however, revising the CFO rules to incorporate some of the requirements currently under the General NPDES Permit program does seem appropriate.

Comment: The 3 proposed alternatives are unlikely to meet IDEM's stated goals; therefore IDEM should adopt a fourth alternative, stated as follows:

Alternative 4. Update the state CFO program to require all CFOs, regardless of size, to comply with a single set of requirements. This set would encompass:

- 1) the requirements currently applied under Indiana state law to permitted CAFOs;
- 2) the requirements under the 2008 revised federal NPDES regulations; and
- 3) additional protective measures as determined by IDEM based on the risk of discharge. IDEM should also eliminate NPDES general permits for CAFOs seeking an NPDES permit. (CLC, HEC, SC)

Response: IDEM intends to regulate all CFOs under the same rule, with the same requirements. Several of the NPDES CAFO regulations are being considered for inclusion in the CFO rule. IDEM is proposing to eliminate NPDES general permits.

CFO Applicability

Comment: The CFO rule applies to all confined feeding operations, including operations that are required to hold a CAFO individual NPDES permit. (CLC, HEC, SC)

Response: IDEM agrees with this comment.

Comment: CFOs that discharge will be required to obtain individual NPDES permits. Discharging CFOs should include at least the following:

- 1) Any facility that spreads manure on frozen ground or on steep slopes;
- 2) Any facility with a documented spill or discharge in the past 20 years;
- 3) Any facility with uncovered pits; and
- 4) Any facility that applies manure to the land using spray irrigation. (CLC, HEC, SC)

Response: On May 28, 2010 the EPA published a guidance document titled: "Implementation Guidance on CAFO Regulations – CAFOs That Discharge or Are Proposing to Discharge." IDEM anticipates that CAFO operators will use this document when determining if they discharge or propose to discharge.

Comment: A single application will be sufficient for both programs. For example, a CAFO NPDES application can serve as the application for CFO approval so that a CAFO with NPDES approval should not need to apply for a separate CFO approval. (CLC, HEC, SC)

Response: IDEM requires a CAFO NPDES permit holder to submit an application in accordance with [327 IAC 19-7-1](#) to apply for approval to construct or expand a confined feeding operation on land for which a valid existing approval has not been issued. A permit holder must also obtain a separate construction approval when expanding the CAFO to increase animal capacity or manure containment capacity. This requirement can be met by submitting an application in accordance with [327 IAC 19-7-1](#). The department will include the approval in the CAFO NPDES permit.

Comment: It is appropriate for the CFO program to encompass smaller facilities than the NPDES program. But the definition of CFO in the existing CFO regulations appears inconsistent and IDEM should revise the definition of CFO. (CLC, HEC, SC)

Response: The definition of a CFO is given in [IC 13-11-2-40](#). IDEM must follow this statutory definition for all regulatory actions.

Comment: Are some individuals trying to beat the pollution rules or laws under the CFO law by staying under the numbers and out of the radar? Does it void the rules when they are avoided? Numbers increase and decrease, who's counting? (MH)

Response: IDEM only has the authority to regulate those AFOs that fall under the statutory definition of a CFO.

Comment: Today anyone living rurally must get an expensive mound septic tank system permit for waste in order to get a residential building permit. Isn't it a requirement to get a permit for animal manure waste (MMP) in order to get a building permit for a confined animal structure in a rural community? If it depends on soil, slope, and drainage, or lack of it, to acquire a mound septic tank system to protect groundwater, how can hundreds of confined animal owners not have to get a permit in order to build a structure? (MH)

Response: All CFOs, as defined in [IC 13-11-2-40](#), are required to obtain a permit that is based on proposing environmentally sound structures that are protective of the surface and ground water. The statutory authority to require such permits for animal feeding operations that are smaller than CFOs has not been provided.

Construction Requirements

Comment: Technical and engineering standards for construction should be the same for all sizes of permitted operations whether they are permitted in the NPDES or AFO programs. However, those standards and their implementation should not be static. Alternative technical standards and designs should be permitted when they are protective of human health and the environment. (LPRRG, IFB)

Response: Construction standards will be the same for all operations regardless of size. IDEM recognizes that technology is dynamic and will allow for equivalent standards where appropriate.

Comment: [327 IAC 16-4-3](#) should be removed because size should not be an indicator for whether additional

environmental protection is needed for construction and operation. To the extent that geologic conditions require additional protective measures, that authority is found in [327 IAC 16-8-3](#). (LPRRG, IFB)

Response: IDEM agrees with this comment.

Comment: Manure production estimates and storage capacity calculations should be reviewed and updated as necessary. The manure production estimates should be based upon current data available through the ASABE (American Society of Agricultural and Biological Engineers), Natural Resources Conservation Service (NRCS), Midwest Plan Service and Land Grant Universities. Guidance should be updated to reflect these changes. (LPRRG, IFB)

Response: IDEM will be revising their CFO guidance document to compliment the new rule. The variables currently used in estimating manure production will be compared with the current publications mentioned in the comment. Updates will be made as appropriate.

Comment: Flexibility in construction requirements or even a parallel set of construction requirements must be incorporated into the AFO rule to allow producers to properly construct and use manure digesters or gasifiers. When constructing a new facility or retrofitting an existing facility, current construction standards must be adjusted accordingly to properly accommodate this technology. (LPRRG, IFB)

Response: The current and proposed CFO rules consider digesters to be manure storage vessels and they will be required to meet the same standards as manure storage tanks. Any complications with permitting pertain to the desire for approval to accept off-site waste materials as feedstock for the digester. This addition of off-site waste can complicate the current approval process and the proposed solid waste digester rule under LSA# 09-193 will simplify that issue.

Comment: Technical and engineering standards for facility and manure containment construction should be appropriately protective for the specific risk posed by such facility or containment structure. (CLC, HEC, SC)

Response: IDEM agrees with this comment.

Comment: Specific risk should be based on a number of factors, including facility size, method of manure storage, subsurface characteristics, slope of site, and proximity to sensitive areas or water bodies. (CLC, HEC, SC)

Response: One goal of this rulemaking is to have one set of rules that every CFO, regardless of size, must follow. However, IDEM is proposing in several areas of the rule to regulate based on site specific characteristics, such as proximity to sensitive areas, in order to ensure the rule is protective of human health and the environment.

Comment: A professional engineer on the project should be required to certify that CFO and CAFO facilities and manure containment structures are built according to designs approved by IDEM. (CLC, HEC, SC)

Response: IDEM agrees with this comment.

Comment: Require a four sided and covered animal compost bin. (MN) (DCM) (GH) (BSC)

Response: Mortality composting systems are now a part of the "waste management system" definition and will have to comply with all applicable design and construction requirements within [327 IAC 19-12](#).

Comment: Greater care must be given as to where these CFOs are permitted to be built. Is the land in question in or near the flood plain/floodway? If so, then the language needs to be changed as well as the setbacks. If it's a proven fact that the land in question floods frequently, then it must be written so as to leave no doubt that the land is not a suitable location. (JSF, MBA)

Response: Current and future CFO regulations prohibit construction of waste management systems in a floodway. These regulations also restrict construction in 100 year flood plains and sensitive areas. Proposed waste management system setbacks can be found in the draft rule at [327 IAC 19-12-2](#).

Good Character and Performance Bonding Requirements

Comment: The CFO rule should incorporate provisions pursuant to Ind. Code § 13-18-10-1.4 and Ind. Code § 13-18-10-2.1(e) and (f). (CLC, HEC, SC)

Response: Currently the Good Character requirements as outlined in the statute are adequate to implement the Good Character evaluation process and IDEM has not identified a need to propose any regulatory requirements to supplement the statute.

Comment: The CFO rule should incorporate provisions requiring a performance bond to ensure proper operation and closure. (CLC, HEC, SC) (JS) (MN) (DCM) (GH) (TDT) (RH)

Response: IDEM currently lacks the statutory authority to require any kind of bonding for CFOs.

Comment: Before a CFO or CAFO is allowed to transfer property between operators, the purchaser/recipient must satisfy good character and performance bonding requirements prior to transfer. (CLC, HEC, SC) (JS)

Response: IDEM currently lacks the statutory authority to require any kind of bonding for CFOs or apply Good Character requirements to the transfer of a permit.

Notifications

Comment: [327 IAC 16-7-13\(a\)\(2\)](#) should be removed. It refers to additional requirements based upon a size distinction which should not exist. (LPRRG, IFB)

Response: IDEM agrees with this comment.

Comment: Notice for new construction should be consistent with the provisions amended in [IC 13-18-10-2](#) by

SEA 221. (LPRRG, IFB)

Response: IDEM will comply with all statutory requirements.

Comment: The operator should report and certify land applications of CFO and CAFO manure and this information should be made available to the public. (CLC, HEC, SC)

Response: Land application records are kept in the operating record on-site for inspection by IDEM staff.

Comment: All records, including NMPs, reports of waste management practices, locations, nutrient balance, crop rotations, etc. should be made available to the public. (CLC, HEC, SC)

Response: The approval application includes all relevant records and is subject to public notification and comment when a facility is constructing or expanding. Land application records are kept in the operating record on-site for inspection by IDEM staff.

Comment: Public notice and comment should be required for NMPs prior to issuing a CFO approval when any of the risk factors are present, including large facility size and open-pit manure storage methods. (CLC, HEC, SC) (MH)

Response: CFOs are required to submit a manure management plan, not an NMP as specified in the federal NPDES CAFO rule. The manure management plan is part of the approval application, which is subject to public notification and comment when a facility is constructing or expanding.

Comment: A list of application requirements for applying for a permit for a manure digester or gasifier should be developed by IDEM. This list would help alleviate delays in the permitting process by ensuring the application is complete upon submission. (LPRRG, IFB)

Response: IDEM agrees with this comment and the solid waste rule currently being developed at LSA# 09-193 addresses digesters and will contain a list of registration requirements.

Comment: Public hearings for AFO's should only be held when the request for a public hearing is supported by issues within the scope of the permit or approval. If there is no material change in animal number or manure storage capacity, there should be no need for a hearing. Those seeking either general or individual NPDES permits will need to have public comments in line with federal requirements. (LPRRG, IFB)

Response: Public meetings for CFO approvals will be held at the commissioner's discretion. NPDES CAFO permit holders will comply with all federal requirements.

Operation and Maintenance

Comment: Animal feeding operations should record weekly water line inspections, depth of freeboard on outdoor, uncovered manure storage structures, and storm water and runoff diversion inspections. (LPRRG, IFB)

Response: IDEM agrees with this comment.

Comment: Animal feeding operations should record rainfall amounts for the periods of 24 hrs before, during, and 24 hrs after manure application on land owned or controlled by the AFO owner. If all rainfall events are recorded, non-rainfall events do not need to be recorded. (LPRRG, IFB)

Response: IDEM agrees with this comment.

Comment: Setback distances from features for manure storage and application should be the same for all operations, regardless of whether they have an animal feeding operation approval or NPDES permit. The terms, captions and titles for the tables and regulations should be identical. (EX. Table 1 in 15-15-12 is different than Table 1 in 16-10-4). (LPRRG, IFB)

Response: IDEM is proposing to remove the General NPDES Permit as an option and is also proposing a revised table for land application setbacks that differs from the previous CFO setbacks, as well as the NPDES CAFO setbacks.

Comment: Have greater setbacks from residential areas and waterways. (TDT) (JSF, MBA)

Response: IDEM is proposing some revisions to existing setbacks as well as adding setbacks. The proposed setbacks for waste management systems can be found in [327 IAC 19-12-2](#) of the draft rule.

Comment: The disposal of dead animals should be discussed with the Board of Animal Health (BOAH) and a joint effort made to establish new regulations. (BSC)

Response: IDEM is proposing that all CFOs prepare and submit a mortality management plan. This plan will include setbacks, siting requirements, and primary and secondary means of disposal. This proposal was discussed with BOAH and the plan would be kept in the operating record.

Nutrient Management

Comment: It is not necessary that the nutrient management planning requirements for AFOs be the same as those for operations subject to an NPDES permit. The requirements for the NMP for AFOs should be basic enough to cover a wide variety of operations. Accordingly, it should be limited to such items as soil tests being required every three years, listing of crops to be planted, manure utilization and annual manure testing. This information should remain available to IDEM during inspections but maintained on the farm or other location where the records can be made available to IDEM. (LPRRG, IFB)

Response: IDEM is proposing that all CFOs prepare and submit a manure management plan. This plan is similar to the manure management plan in the current CFO rule, with some additional requirements. This plan must be kept on-site in the operating record.

Comment: Soil Conservation Practice Plans (SCPPs) should not be required by the AFO Rule. (LPRRG, IFB)

Response: IDEM is not proposing to require that CFOs submit a SCPP. However, IDEM is still requiring that CFOs develop and implement a Soil Conservation Plan for land application sites listed by the NRCS as highly erodible.

Comment: Manure application records should be kept up to date. To allow for accurate land application records to be prepared and maintained in a formal operating record, a period of 45 days after manure application should be allowed to transfer application from the field application sheets to the operating record reporting forms. This standard will provide more uniformity to the inspection/enforcement process. Establishing this deadline will assure producers understand exactly what is expected of them and will also result in uniformity of inspections by IDEM inspectors. (LPRRG, IFB)

Response: IDEM will be considering a time allowance for updating records as it is realistic that in many cases the actual calculations, recordings, etc., will take some time.

Comment: IDEM should either incorporate the scientific premise found in the NRCS 590 standard or adopt the NRCS 590 standard as the basic guidance document used for manure application. Manure application rates for all operations should be based upon available nitrogen and phosphorus content of the manure, the fertilizer needs of the crops, credit for other sources of fertilizer and potential environmental impacts. (LPRRG, IFB)

Response: The current NPDES CAFO rule refers to the NRCS 590 standard as the application rate standard. IDEM rules are required to reference a specific edition of any referenced standard and are not allowed to reference the "current version". The NRCS conservation practices are updated on a regular basis and IDEM finds it cumbersome to go thru a rule change when the NRCS updates the standard. The IDEM CFO rule will propose a standard that reflects the intent and general contents of the NRCS 590 standard.

Comment: For fields that are high in soil test phosphorus such that the NRCS 590 standard would limit or eliminate applications, manure applications should be allowed based upon additional considerations such as conservation practices, soil types and topography while still being protective of the environment. In this scenario, an application plan on fields where soil test phosphorus levels would limit or eliminate applications could include a P application rate that is less than crop phosphorus removal rates to reduce soil test phosphorus levels. (LPRRG, IFB)

Response: IDEM is proposing that all acreage with a phosphorus level over 200 ppm may comply with a phase in schedule for the application of phosphorus. The end of this schedule will result in no application on acreage with a phosphorus level over 200 ppm.

Comment: Any operation which is approved for construction or expansion after the effective date of this rule amendment should be required to comply with the NRCS 590 standard. For operations approved prior to the effective date of these amendments, a phase-in period will be needed to effectively allow for compliance with the NRCS 590 standard. Operations in existence prior to the effective date of implementation of the AFO rule should be given a period of 10 years after adoption of this rule to comply with the NRCS 590 Standard. (LPRRG, IFB)

Response: IDEM agrees that all new facilities will have to comply with the new rule immediately upon its effective date. IDEM also agrees that a phase-in period for existing CFOs is appropriate, but 10 years is too long.

Comment: Applications of nitrogen should allow for losses due to time and method of application. N losses should be realistic. This provision is essential to allow for realistic crop nutrient management utilizing manures and other organic nutrient sources. Unrealistic requirements and guidelines limit practical and environmentally sound manure and crop nutrient management planning and implementation. (LPRRG, IFB)

Response: IDEM has resisted allowing nitrogen losses to the calculated application rate due to the uncertainty of how great losses are and the variability of all factors to be considered. Many corn growers now monitor soil or plant tissue nitrogen levels at the critical stage of demand and side dress the crop to supplement nitrogen if needed. This ability negates the argument that crop growers using manure cannot administer sound manure and crop nutrient management practices. However, as new guidance is developed for the rule, application nutrient losses will again be a topic of consideration.

Comment: Flexibility should be built into the nutrient management process to allow for and encourage the practice of accepting manure from other livestock operations or waste products from other industries when a livestock operator is using a manure digester or gasifier. (LPRRG, IFB)

Response: IDEM has incorporated reference to the proposed solid waste rule being developed at LSA# 09-193, for farms seeking approval to accept off-site waste.

Comment: According to the 2005 Waterkeeper court and the 2008 federal CAFO rule, the terms of the Nutrient Management Plans ("NMP") are enforceable effluent limitations that must be included in the NPDES permit. (CLC, HEC, SC)

Response: All federal regulations will be followed.

Comment: An NMP should be required for every CFO approved. NMP requirements for CFOs should be the same as those for operations subject to an NPDES permit. (CLC, HEC, SC)

Response: IDEM will require every CFO to prepare and submit a manure management plan, and is proposing to revise the contents of the manure management plan to make it more similar to the nutrient management plan required to be submitted by those farms with a NPDES CAFO permit.

Comment: The NMP should be an enforceable component of the CFO permit and all records pertaining to its implementation should be publicly available. At a minimum this should include:

- 1) location of the facility and proximity to drain tiles and waters of the state;
- 2) number and type of animals;
- 3) a full definition of waste management techniques including where and how often waste is applied;
- 4) what crops are used to absorb the nutrients;
- 5) mass and concentration of nutrients and pathogens with maximum application amounts, types and locations;
- 6) seasonal constraints such as no winter or frozen ground operations, precipitation related restrictions, and wind restrictions. (CLC, HEC, SC)

Response: A manure management plan is an enforceable part of the CFO approval and IDEM is proposing to add requirements for additional information in the manure management plan which can be found at [327 IAC 19-7-5](#) in the draft rule.

Comment: A process should be established for modifying NMPs once program coverage is granted. (CLC, HEC, SC)

Response: Farms operating with individual NPDES permits will need approval to modify their NMP and a process for that will be developed.

AFO Accidental Discharges

Comment: Accidental discharges should not trigger mandatory entry into the NPDES program. The CWA clearly states that any pollutant discharge is illegal unless it is in compliance with the law. 33 U.S.C. 1311(a) (2008). Thus, an accidental discharge from a confinement operation without an NPDES permit violates the CWA, but the EPA CAFO NPDES rule would not necessarily force the operator to obtain an NPDES permit. According to EPA, if a CAFO certified that it does not discharge or propose to discharge and subsequently has an accidental discharge, the CAFO must show that the CAFO meets all the eligibility criteria outlined in 40 C.F.R. 123.23(i)(2). If these criteria are met, the CAFO has satisfied its burden and can continue operation without seeking a NPDES permit. 123.23(j)(2). Similar standards to those in 123.23(i)(2) could be used by IDEM to determine if an AFO with an accidental spill should not have certified that it does not discharge or propose to discharge. (LPRRG, IFB)

Response: If a certified CAFO does discharge, for any enforcement action alleging failure to seek permit coverage the burden is on the commissioner to establish that the CAFO "proposed to discharge". IDEM anticipates that the May 28, 2010 guidance from the EPA on what is considered proposing to discharge will be used in any determinations the department makes.

Comment: Any CFO or CAFO that is not regulated and has a spill into the waters of the state should immediately be placed on the regulated list. (MN) (DCM) (GH)

Response: Any farm that is a CFO as defined in [IC 13-11-2-40](#) must comply with all CFO rules. If a CAFO certifies that they do not propose to discharge and therefore is not required to get an NPDES permit, they will then fall within the purview of the CFO rule. Therefore there is no such thing as an "unregulated" CFO or CAFO.

AFO Guidance Documents

Comment: The AFO rule should contain a guidance document listing:

- 1) the requirements an operation must meet to avail itself of the protections available under the federal agricultural storm water exemption;
- 2) standardized procedures for collecting and analyzing soil samples and interpreting soil analysis results; and
- 3) standardized procedures for taking and analyzing manure samples. (LPRRG, IFB)

Response: Guidance documents may be prepared for all 3 points in the form of non-rule policy documents. Rule language is not the appropriate place to address these issues.

AFO Appeals of Violations

Comment: Other than a court action, there is no mechanism available to the CFO operator to challenge the interpretation of what was observed during an inspection. The livestock group recommends that IDEM implement a procedure where, administratively within IDEM, a CFO operator can challenge those interpretations. Creating this avenue for debate between the operator and IDEM will help to ensure violations are not issued based simply on a miscommunication between an operator and an inspector. Discussing these issues through an administrative process would also help to protect both operators and IDEM from the costs associated with a lawsuit filed to challenge a violation. (LPRRG, IFB)

Response: IDEM inspectors routinely discuss their findings with the responsible party after the inspection is completed. If a responsible party disagrees with the inspector they should contact the inspector's supervisor to express the basis for their disagreement.

NPDES Program

Comment: There must be a procedure in place that allows a producer to opt out of an NPDES permit and into the AFO program. According to Indiana Administrative Code, a CAFO exiting the NPDES program can enter the CFO program if it meets the definition of a CFO and submits a new approval application. [327 IAC 15-15-20\(d\)](#). Since all operations currently operating with NPDES permits are considered CFOs by Indiana statute, perhaps

[327 IAC 15-15-20](#) should be amended so that operations exiting the NPDES program will automatically be regulated by the AFO rule. Similar language should also be incorporated into [327 IAC 5-4-3](#). (LPRRG, IFB)

Response: IDEM agrees with this comment, and has added language that allows farms with a NPDES CAFO permit to exit that program if they choose to certify that they do not discharge or propose to discharge, or determine that they no longer have a duty to maintain their NPDES permit.

Miscellaneous

Comment: AFO and NPDES regulations should allow for the use of manure and poultry litter as a feedstock for energy production. As farmers move forward into energy ventures, it is crucial that they be able to design their operations to accommodate digesters and gasifiers. (LPRRG, IFB)

Response: The draft rule allows for digesters and gasifiers.

Comment: Manure storage structures built off-site should be regulated just as if they are on site. CFO or CAFO manure stored or spread by a broker or final buyer should be regulated just as if stored or spread on-site. (CLC, HEC, SC) (JS) (MN) (DCM) (GH) (TDT) (BSC) (RH)

Response: IDEM agrees that off-site storage structures should be regulated; however the Indiana statutes concerning CFOs are very clear. IDEM currently does not have the authority to regulate these structures under a CFO rule.

Comment: An operator closing a facility or manure storage structure should not be able to sell or abandon the property until closure is complete. (CLC, HEC, SC) (BSC) (RH)

Response: IDEM has revised some of the CFO rule language in order to ensure proper closure. However, IDEM is not able to regulate real estate or banking transactions.

Comment: Many Indiana waterways suffer from E. coli impairment. By our estimates, Indiana's livestock populations produce about 10 times as much coliform bacteria as human populations. Literature reports indicate that E. coli concentrations in field tiles can reach very high levels after land application of manure and field tiles can serve as a conduit to carry manure and its pathogens to our streams. In order to ensure that CFOs and CAFOs are not causing or contributing to water quality violations and stream impairments, rules must include Best Control Technologies for minimizing pathogen contamination of ground water and surface water. (CLC, HEC, SC)

Response: IDEM agrees that manure application on the ground can pose a risk of manure constituents entering surface water and groundwater. Current limitations on land application activities incorporate Best Management Practices recognized as minimizing those risks. The proposed rule addresses those risks through limiting application rates, requiring setbacks based on the application method and site topography, implementing conservation practices on sites posing higher potential of runoff, site monitoring during the application process and monitoring and keeping records of those activities. These practices are the best control measures that are practical to impose at this time.

Comment: Pathogen content should be regulated in all CFO and CAFO permits and regularly monitored in air and groundwater at manure storage sites and in water flowing from land application sites. (CLC, HEC, SC)

Response: There currently are no pathogen related standards within the federal regulations for animal feeding operations and IDEM is not proposing to require continuous monitoring of air or groundwater at all CFO/CAFO sites. There are also no federal air standards for AFOs to consider for that type of monitoring.

Comment: In order to determine whether the storm water discharge exemption applies in particular circumstances, as well as to ensure that effluent limitations are met, CFOs and CAFOs must be required to monitor and document any discharges from land application areas. (CLC, HEC, SC)

Response: The draft rule incorporates a requirement for monitoring surface water drainage ways and accessible field tile outlets when land application occurs. Any discharge during this time would be considered a spill and appropriate notifications and containment activities are required. Continuous monitoring of these outlet points is unreasonable due to several obstacles. In many cases, land application sites are not owned by the CFO and there is limited access to the fields, especially when crops are occupying the sites. Costs of monitoring would be excessive if water samples were taken for verification of water quality.

Comment: The storm water exemption should apply only where land application of manure results in a precipitation-related discharge that occurs when land application is done in accordance with IDEM rules, and consistently recorded and made available to the public. (CLC, HEC, SC)

Response: IDEM agrees with the statement of when the storm water exemption is appropriate due to the management and recording of the farm activities in compliance with the rules. IDEM is not considering requiring farm operating records to be submitted to IDEM.

Comment: The ability to transfer an AFO approval should remain in place. (LPRRG, IFB)

Response: IDEM agrees with this comment.

Comment: Manure brokers should be regulated. (JS) (MN) (DCM) (GH) (TDT) (RH)

Response: IDEM agrees, and has referenced the State Chemist's Office rules concerning the marketing and distribution of manure.

REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for

specific revisions to language to be contained in the draft rule. It also requests comments on the potential fiscal impacts of the draft rule. Mailed comments should be addressed to:

#09-615(WPCB) (CFO Rulemaking)

Janet Pittman

Rules Development Branch

Office of Legal Counsel

Indiana Department of Environmental Management

100 North Senate Avenue MC 65-46

Indianapolis, Indiana 46204-2251

Hand delivered comments will be accepted by the receptionist on duty at the thirteenth floor reception desk, Office of Legal Counsel, 100 North Senate Avenue, Indianapolis, Indiana.

Comments may be submitted by facsimile at the IDEM fax number: (317) 233-5970, Monday through Friday, between 8:15 a.m. and 4:45 p.m. Please confirm the timely receipt of faxed comments by calling the Rules Development Branch at (317) 232-8922.

COMMENT PERIOD DEADLINE

Comments must be postmarked, faxed, or hand delivered by September 24, 2010.

Additional information regarding this action may be obtained from Lydia Kuykendal, Rules Development Branch, Office of Legal Counsel, (317) 234-5345, or (800) 451-6027 (in Indiana).

DRAFT RULE

SECTION 1. [327 IAC 19](#) IS ADDED TO READ AS FOLLOWS:

ARTICLE 19. CONFINED FEEDING OPERATIONS

Rule 1. General Provisions

[327 IAC 19-1-1](#) Purpose

Authority: [IC 13-14-8-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-18-10](#); [IC 13-22](#)

Sec. 1. The purpose of this article is to:

- (1) impose construction and operational requirements for confined feeding operations (CFOs) in order to implement [IC 13-18-10](#); and**
- (2) protect human health and the environment from threats to water quality.**

(Water Pollution Control Board; [327 IAC 19-1-1](#))

[327 IAC 19-1-2](#) Applicability

Authority: [IC 13-14-8-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2-40](#); [IC 13-18](#); [IC 13-22](#)

Sec. 2. (a) This article applies to all CFOs as defined in [IC 13-11-2-40](#).

(b) Under this article a person may not start:

- (1) construction of a confined feeding operation; or**
- (2) expansion of a confined feeding operation that increases animal capacity or manure containment capacity, or both;**

without obtaining the prior approval of the department.

(c) Unless otherwise stated, all requirements of this article must be met upon its effective date.

(Water Pollution Control Board; [327 IAC 19-1-2](#))

[327 IAC 19-1-3](#) Appeal of decisions

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 4-21.5](#); [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 3. A decision by the commissioner to approve, deny, revoke, amend, require an approval, or impose additional requirements under this article is appealable under [IC 4-21.5](#). Information on appeal rights shall be provided with the documentation of the commissioner's decision.

(Water Pollution Control Board; [327 IAC 19-1-3](#))

Rule 2. Definitions

[327 IAC 19-2-1](#) "Agronomic rate" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 1. "Agronomic rate" means a rate of application of manure to the land based on:

- (1) the nutrient content of the manure to be applied;
- (2) the fertility level of the soil;
- (3) the nutrient needs of the current or planned crops;
- (4) the nutrient holding capacity of the soil; and
- (5) additional sources of nutrients, including legume credits, process wastewater, biosolids, or commercial fertilizer.

(Water Pollution Control Board; [327 IAC 19-2-1](#))

[327 IAC 19-2-2](#) "Bedrock" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 2. "Bedrock" means cemented or consolidated earth materials exposed on the earth's surface or underlying unconsolidated earth materials.

(Water Pollution Control Board; [327 IAC 19-2-2](#))

[327 IAC 19-2-3](#) "Commissioner" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2-35](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 3. "Commissioner", as defined in [IC 13-11-2-35](#), refers to the commissioner of the department of environmental management.

(Water Pollution Control Board; [327 IAC 19-2-3](#))

[327 IAC 19-2-4](#) "Confined feeding" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2-39](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 4. (a) "Confined feeding", as defined in [IC 13-11-2-39](#), means the confined feeding of animals for

food, fur, or pleasure purposes in lots, pens, ponds, sheds, or buildings where:

- (1) animals are confined, fed, and maintained for at least forty-five (45) days during any twelve (12) month period; and
- (2) ground cover or vegetation is not sustained over at least fifty percent (50%) of the animal confinement area.

(b) The term does not include the following:

(1) A livestock market:

- (A) where animals are assembled from at least two (2) sources to be publicly auctioned or privately sold on a commission basis; and
- (B) that is under state or federal supervision.

(2) A livestock sale barn or auction market where animals are kept for not more than ten (10) days.

(Water Pollution Control Board; [327 IAC 19-2-4](#))

[327 IAC 19-2-5](#) "Confined feeding operation" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 4-21.5](#); [IC 13-11-2-40](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 5. "Confined feeding operation", as defined in [IC 13-11-2-40](#), means any:

(1) confined feeding of at least:

- (A) three hundred (300) cattle;
- (B) six hundred (600) swine or sheep;
- (C) thirty thousand (30,000) fowl; or
- (D) five hundred (500) horses;

(2) animal feeding operation electing to be subject to [IC 13-18-10](#); or

(3) animal feeding operation that causes a violation of:

- (A) water pollution control laws;
- (B) any rules of the water pollution control board; or
- (C) [IC 13-18-10](#).

A determination by the department under this subdivision is appealable under [IC 4-21.5](#).

(Water Pollution Control Board; [327 IAC 19-2-5](#))

[327 IAC 19-2-6](#) "Constructed wetlands" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 4-21.5](#); [IC 13-11-2-40](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 6. "Constructed wetlands" means an approved waste management system designed to maximize the removal of pollutants from process wastewater or other runoff through wetland vegetation uptake, retention, and settling.

(Water Pollution Control Board; [327 IAC 19-2-6](#))

[327 IAC 19-2-7](#) "Construction" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2-40.8](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 7. "Construction", as defined in [IC 13-11-2-40.8](#), for purposes of [IC 13-18-10](#), means the fabrication, erection, or installation of a facility or manure control equipment at the location where the facility or manure control equipment is intended to be used. The term does not include the following:

- (1) The dismantling of existing equipment and control devices.
- (2) The ordering of equipment and control devices.
- (3) Off-site fabrication.

(4) Site preparation.

(Water Pollution Control Board; [327 IAC 19-2-7](#))

[327 IAC 19-2-8](#) "Contaminated runoff" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 8. "Contaminated runoff" means any precipitation or surface water that has come into contact with any liquid or solid animal excreta or any used bedding, litter, or waste liquid at the confined feeding operation.

(Water Pollution Control Board; [327 IAC 19-2-8](#))

[327 IAC 19-2-9](#) "Department" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2-51](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 9. "Department", as defined in [IC 13-11-2-51](#), refers to the department of environmental management.

(Water Pollution Control Board; [327 IAC 19-2-9](#))

[327 IAC 19-2-10](#) "Discharge" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 10. "Discharge", for purposes of this article, means any addition of any pollutant, or combination of pollutants, into any waters of the state from a point source. The term includes, without limitation, an addition of a pollutant into any waters of the state from the following:

- (1) Surface runoff that is collected or channeled by human activity.
- (2) Discharges through pipes, sewers, or other conveyances, including natural channels, that do not lead to treatment works.

(Water Pollution Control Board; [327 IAC 19-2-10](#))

[327 IAC 19-2-11](#) "Drainage inlet" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 11. "Drainage inlet" means any surficial opening to an underground tile drainage system that drains to waters of the state. For purposes of this article, the term includes water and sediment control basins.

(Water Pollution Control Board; [327 IAC 19-2-11](#))

[327 IAC 19-2-12](#) "Feedlot" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 12. "Feedlot" means an outside lot or pen used for confined feeding, including areas that may be covered, partially covered, or uncovered.

(Water Pollution Control Board; [327 IAC 19-2-12](#))

[327 IAC 19-2-13](#) "Filter strip" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 13. "Filter strip" means a relatively uniform and maintained vegetated area used for collecting sediment and cleansing runoff.

(Water Pollution Control Board; [327 IAC 19-2-13](#))

[327 IAC 19-2-14](#) "Flood plain" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 14. "Flood plain" means any area adjoining a river, stream, or lake that has been or may be covered by a one hundred (100) year flood.

(Water Pollution Control Board; [327 IAC 19-2-14](#))

[327 IAC 19-2-15](#) "Floodway" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 15. "Floodway" means the channel of a river or stream and those portions of the flood plain adjoining the channel that are reasonably required to efficiently carry and discharge the peak flood flow of a one hundred (100) year flood as determined by [310 IAC 6](#).

(Water Pollution Control Board; [327 IAC 19-2-15](#))

[327 IAC 19-2-16](#) "Gradient barrier" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 16. "Gradient barrier" means a structure or feature that prevents runoff from entering waters of the state.

(Water Pollution Control Board; [327 IAC 19-2-16](#))

[327 IAC 19-2-17](#) "Ground water" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 17. "Ground water" means accumulations of underground water, natural or artificial, public and private, or parts thereof, that are wholly or partially within, flow through, or border upon this state, but excluding man-made underground storage or conveyance structures.

(Water Pollution Control Board; [327 IAC 19-2-17](#))

[327 IAC 19-2-18](#) "Highly erodible land" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 18. "Highly erodible land" means land that has a high potential to erode based on site-specific characteristics, such as:

- (1) slope length and steepness;
- (2) rainfall;
- (3) runoff;
- (4) wind;
- (5) soil type; and
- (6) soil conditions.

(Water Pollution Control Board; [327 IAC 19-2-18](#))

[327 IAC 19-2-19](#) "Historic site" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#); [IC 14-8-2-125](#)

Sec. 19. "Historic site", as defined in [IC 14-8-2-125](#), means a site that is important to the:

- (1) general;
- (2) archaeological;
- (3) agricultural;
- (4) economic;
- (5) social;
- (6) political;
- (7) architectural;
- (8) industrial; or
- (9) cultural;

history of Indiana. The term includes adjacent property that is necessary for the preservation or restoration of the site.

(Water Pollution Control Board; [327 IAC 19-2-19](#))

[327 IAC 19-2-20](#) "Incorporation" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 20. "Incorporation" means the:

- (1) mixing of liquid or solid manure with the surface soil using standard agricultural practices, such as tillage; or
- (2) placement of liquid manure beneath the surface of the soil in the crop root zone using equipment specifically designed for this purpose.

(Water Pollution Control Board; [327 IAC 19-2-20](#))

[327 IAC 19-2-21](#) "Karst terrain" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 21. "Karst terrain" means an area where karst topography, including the characteristic surface and subterranean features, has developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include the following:

- (1) Sinkholes.
- (2) Sinking streams.
- (3) Caves.
- (4) Large springs.
- (5) Blind valleys.

(Water Pollution Control Board; [327 IAC 19-2-21](#))

[327 IAC 19-2-22](#) "Manure" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 22. "Manure" means any:

- (1) liquid or solid animal waste; or
- (2) bedding, litter, waste liquid, composted mortality, contaminated runoff, or other materials commingled with manure.

(Water Pollution Control Board; [327 IAC 19-2-22](#))

[327 IAC 19-2-23](#) "Manure application" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 23. "Manure application" means the placement of liquid or solid manure by:

- (1) spraying or spreading onto the land surface; or
- (2) incorporation into the soil.

(Water Pollution Control Board; [327 IAC 19-2-23](#))

[327 IAC 19-2-24](#) "Manure storage facility" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 24. "Manure storage facility" means any pad, pit, pond, lagoon, tank, building, or manure containment area used to store or treat manure, including any portions of buildings used specifically for manure storage or treatment.

(Water Pollution Control Board; [327 IAC 19-2-24](#))

[327 IAC 19-2-25](#) "Manure transfer system" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 25. "Manure transfer system" means any pipes, lift stations, pumps, or other stationary devices used for the transfer of manure.

(Water Pollution Control Board; [327 IAC 19-2-25](#))

[327 IAC 19-2-26](#) "Operating record" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 26. "Operating record" means the written record of the confined feeding operation activities required by this article and kept by the owner/operator.

(Water Pollution Control Board; [327 IAC 19-2-26](#))

[327 IAC 19-2-27](#) "Owner/operator" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 27. (a) "Owner/operator", for purposes of this rule, means the person:

- (1) that owns the waste management systems at the confined feeding operation;**
- (2) that owns the livestock at the confined feeding operation and that applies for or has received an approval under this article; or**
- (3) in direct or responsible charge or control of one (1) or more confined feeding operations or land application activity.**

(b) The term includes contractors responsible for activities described in [327 IAC 19-1-1\(a\)](#) at the confined feeding operation.

(Water Pollution Control Board; [327 IAC 19-2-27](#))

[327 IAC 19-2-28](#) "Potentially available nitrogen" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 28. "Potentially available nitrogen" means the nitrogen that could be realistically taken up by a crop during one (1) growing season. Potentially available nitrogen is usually calculated as the sum total of:

- (1) ammonium nitrogen;**
- (2) nitrate nitrogen; and**
- (3) the percent organic nitrogen that will mineralize in one (1) growing season.**

(Water Pollution Control Board; [327 IAC 19-2-28](#))

[327 IAC 19-2-29](#) "Process wastewater" defined

Authority: [IC 13-14-8](#); [IC 13-14-9](#); [IC 13-15-1-2](#); [IC 13-15-2-1](#); [IC 13-18-3](#)

Affected: [IC 13-11-2](#); [IC 13-18-4](#)

Sec. 29. "Process wastewater" means any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any:

- (1) raw material;**
- (2) intermediate product;**
- (3) finished product;**
- (4) byproduct; or**
- (5) waste product.**

(Water Pollution Control Board; [327 IAC 19-2-29](#))

[327 IAC 19-2-30](#) "Production area" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 30. "Production area" means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes, but is not limited to, open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes, but is not limited to, lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes, but is not limited to, feed silos, silage bunkers, and bedding materials. The waste containment area includes, but is not limited to, settling basins, and areas within berms and diversions that separate uncontaminated storm water. The term includes any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

(Water Pollution Control Board; [327 IAC 19-2-30](#))

[327 IAC 19-2-31](#) "Public water supply surface intake structure" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 31. "Public water supply surface intake structure" means any structure used for the purpose of withdrawing surface water for use in a public water supply system.

(Water Pollution Control Board; [327 IAC 19-2-31](#))

[327 IAC 19-2-32](#) "Public water supply well" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 32. "Public water supply well" means any well that provides water to the public through a water distribution system that:

- (1) serves at least twenty-five (25) persons per day for:
 - (A) drinking;
 - (B) domestic use; or
 - (C) other purposes; or
- (2) has at least fifteen (15) service connections.

(Water Pollution Control Board; [327 IAC 19-2-32](#))

[327 IAC 19-2-33](#) "Registered professional engineer" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#); [IC 25-31](#)

Sec. 33. "Registered professional engineer" means a professional engineer registered by the state under [IC 25-31](#).

(Water Pollution Control Board; [327 IAC 19-2-33](#))

[327 IAC 19-2-34](#) "Sensitive area" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#); [IC 14-31](#); [IC 14-38-1-5](#)

Sec. 34. "Sensitive area" means a site where conditions exist that pose a specific water quality threat to one (1) or more of the following:

- (1) Aquifers used as a source of drinking water.**
- (2) Public water supply wells.**
- (3) Wellhead protection areas.**
- (4) Drinking water supply reservoirs.**
- (5) Areas requiring special protection, such as:**
 - (A) wetlands, except for wetlands constructed for manure management;**
 - (B) karst terrains;**
 - (C) the critical habitat of an endangered species; or**
 - (D) natural areas, including:**
 - (i) parks;**
 - (ii) nature preserves, as regulated under [IC 14-31](#);**
 - (iii) historic sites, as defined in section 19 of this rule; and**
 - (iv) public lands, as defined in [IC 14-38-1-5](#).**

(Water Pollution Control Board; [327 IAC 19-2-34](#))

[327 IAC 19-2-35](#) "Site preparation" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 35. "Site preparation" means any of the following:

- (1) Demolition or wrecking of buildings or other structures.**
- (2) Clearing of building sites.**
- (3) Sale of materials from demolished structures.**
- (4) Blasting.**
- (5) Test drilling.**
- (6) Earthmoving.**
- (7) Excavating.**
- (8) Land drainage.**
- (9) Placement of access lanes or driveways.**
- (10) Installation of utilities.**
- (11) Staking or flagging.**

(Water Pollution Control Board; [327 IAC 19-2-35](#))

[327 IAC 19-2-36](#) "Spill" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 36. "Spill" means any unexpected, unintended, abnormal, or unapproved:

- (1) dumping;**
- (2) leakage;**
- (3) drainage;**
- (4) seepage;**
- (5) discharge; or**
- (6) other loss;**

of petroleum, hazardous substances, extremely hazardous substances, or objectionable substances, including manure. The term does not include releases to impermeable surfaces when the substance does not migrate off the surface or penetrate the surface and enter the soil.

(Water Pollution Control Board; [327 IAC 19-2-36](#))

[327 IAC 19-2-37](#) "Spray irrigation" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 37. "Spray irrigation" means the application of manure on the land through a stationary or mobile sprinkler type system.

(Water Pollution Control Board; [327 IAC 19-2-37](#))

[327 IAC 19-2-38](#) "Staging" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 38. "Staging" means the temporary placement of manure in a pile at the site where the manure will be land applied.

(Water Pollution Control Board; [327 IAC 19-2-38](#))

[327 IAC 19-2-39](#) "Surface application" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 39. "Surface application" means the placement of manure by spraying or spreading onto the land surface.

(Water Pollution Control Board; [327 IAC 19-2-39](#))

[327 IAC 19-2-40](#) "Surface water" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 40. "Surface water" means water present on the surface of the earth, including:

- (1) streams;
- (2) lakes;
- (3) ponds;
- (4) rivers;
- (5) swamps;
- (6) marshes; or
- (7) wetlands.

(Water Pollution Control Board; [327 IAC 19-2-40](#))

[327 IAC 19-2-41](#) "Uncovered" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 41. "Uncovered" means any structure that allows exposure of manure to precipitation events or to the run-on or runoff from precipitation events.

(Water Pollution Control Board; [327 IAC 19-2-41](#))

[327 IAC 19-2-42](#) "Vegetative management system" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 42. "Vegetative management system" means a vegetated area designed to accept contaminated runoff or waste liquid after settling for the purpose of treatment or infiltration into the soil.

(Water Pollution Control Board; [327 IAC 19-2-42](#))

[327 IAC 19-2-43](#) "Waste liquid" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 43. "Waste liquid" means liquid to be handled as manure that is generated at the confined feeding operation, including:

- (1) excess drinking water;
- (2) cleanup water;
- (3) contaminated livestock truck or trailer washwater;
- (4) milking parlor wastewater;
- (5) milk house washwater;
- (6) egg washwater; or
- (7) silage leachate.

(Water Pollution Control Board; [327 IAC 19-2-43](#))

[327 IAC 19-2-44](#) "Waste management system" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 44. "Waste management system" means any approved method of managing manure, mortality composting, or process wastewater at the confined feeding operation, including:

- (1) manure storage facilities;
- (2) manure transfer systems;
- (3) manure treatment systems, such as a:
 - (A) constructed wetland;
 - (B) vegetative management system;
 - (C) wastewater treatment system under a valid national pollutant discharge elimination system (NPDES) permit;
- (4) feedlots;
- (5) confinement buildings;
- (6) waste liquid handling, storage, and treatment systems; or
- (7) mortality composting systems.

(Water Pollution Control Board; [327 IAC 19-2-44](#))

[327 IAC 19-2-45](#) "Waters" defined

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2-265](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 45. (a) "Waters", as defined in [IC 13-11-2-265](#), means:

- (1) the accumulations of water, surface and underground, natural and artificial, public and private; or
- (2) a part of the accumulations of water;

that are wholly or partially within, flow through, or border upon Indiana.

(b) The term does not include:

- (1) a private pond; or
- (2) an off-stream pond, reservoir, or facility built for reduction or control of pollution or cooling of water prior to discharge;

unless the discharge from the pond, reservoir, or facility causes or threatens to cause water pollution.

(Water Pollution Control Board; [327 IAC 19-2-45](#))

Rule 3. Performance Standards

[327 IAC 19-3-1](#) Performance standards

Authority: [IC 13-14-8-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-18](#); [IC 13-22](#)

Sec. 1. (a) A confined feeding operation shall be managed so as to avoid an unpermitted discharge into waters of the state.

(b) A confined feeding operation must be conducted in a manner that minimizes nonpoint source pollution entering waters of the state.

(c) A confined feeding operation shall immediately take all reasonable steps to prevent spills or the discharge of manure in violation of the approval or this article, including seepage and leakage.

(d) All waste management systems must be designed, constructed, and maintained to minimize leaks and seepage and prevent spills, as well as ensure compliance with the water quality standards in [327 IAC 2](#).

(e) Manure to be staged or applied to land in Indiana must be staged or applied in such a manner as:

- (1) not to enter or threaten to enter waters of the state;
- (2) to prevent:
 - (A) runoff;
 - (B) ponding for more than twenty-four (24) hours; and
 - (C) spills; and
- (3) to minimize nutrient leaching beyond the root zone.

(Water Pollution Control Board; [327 IAC 19-3-1](#))

Rule 4. General Approval Conditions

[327 IAC 19-4-1](#) Standards

Authority: [IC 13-14-8-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-18](#); [IC 13-22](#)

Sec. 1. (a) Confined feeding operations must:

- (1) have a valid approval to operate; or
- (2) close in accordance with [327 IAC 19-16](#).

(b) The following conditions apply to all confined feeding approvals:

- (1) The owner/operator must comply with all terms and conditions of the approval and this article.
- (2) The owner/operator shall take all reasonable steps to prevent, minimize, or correct any adverse impact on the environment resulting from noncompliance with the approval or this article.
- (3) The filing by the owner/operator of a request for an approval amendment, revocation and

reissuance, or revocation does not stay or suspend any approval term or condition. The approval may be amended, revoked and reissued, or revoked for causing or threatening to cause harm to the environment.

(4) The approval does not convey any property rights of any sort or any exclusive privilege.

(5) The owner/operator shall allow the commissioner, or an authorized representative (including an authorized contractor acting as a representative of the commissioner), upon the presentation of credentials and in compliance with biosecurity procedures developed by the department in consultation with the Indiana state board of animal health or individual owner/operators as defined in [327 IAC 19-2-27](#) to:

(A) enter upon the confined feeding operation premises or where any records must be kept under the terms and conditions of the approval or this article;

(B) have access for review to any records that must be kept under the terms and conditions of the approval;

(C) inspect, at reasonable times:

(i) any monitoring equipment or method;

(ii) any waste management systems; or

(iii) practices required or otherwise regulated under the approval; and

(D) sample or monitor, at reasonable times, for the purpose of evaluating compliance with the approval or state and federal laws and regulations.

(6) The provisions of this approval are severable and, if any provision of the approval or the application of any provision of the approval to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of this approval shall not be affected thereby.

(c) If determined to be necessary to protect human health or the environment, the commissioner may require additional design standards, operational requirements, or other best management practices, such as:

(1) monitoring systems;

(2) liners;

(3) higher compaction;

(4) reporting;

(5) innovative technology; or

(6) other protective measures.

(Water Pollution Control Board; [327 IAC 19-4-1](#))

Rule 5. Alternate Design or Compliance Approach; Innovative Technology

[327 IAC 19-5-1](#) Alternate design or compliance approach; innovative technology

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 1. (a) The use of a design or compliance approach other than the requirement specified in this article, or an innovative technology may be proposed by the owner/operator in accordance with the following:

(1) The proposal for the alternative design or compliance approach, or innovative technology must be accompanied by documentation that indicates that the performance standards in [327 IAC 19-3-1](#) will be met. The alternative design or compliance approach, or innovative technology must comply with all existing environmental rules and laws.

(2) The proposed design or compliance approach, or innovative technology must be incorporated into the approval.

(b) In making a determination on an alternate design or compliance approach, or innovative technology, the commissioner shall consider applicable criteria that may include the following:

(1) Design specifications that indicate adequate structural integrity.

(2) Protective measures that reduce the potential for spills.

(3) The existence of barriers or surface gradient that directs liquid flow away from features specified

for protection.

(4) Operational practices that provide additional protection.

(5) Threats of adverse impacts to water quality or other specified sensitive areas.

(6) Other criteria related to protection of the environment or human health.

(c) The commissioner shall provide written documentation describing the basis for the approval or denial of the proposed alternate design, compliance approach, or innovative technology.

(Water Pollution Control Board; [327 IAC 19-5-1](#))

Rule 6. Existing Confined Feeding Operations

[327 IAC 19-6-1](#) Existing confined feeding operations

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10-1](#); [IC 13-18-10-2.3](#); [IC 13-30](#)

Sec. 1. (a) All CFOs must be maintained and operated in compliance with all applicable:

(1) state laws; and

(2) approval conditions.

(b) The owner/operator of existing confined feeding operations shall comply with the following requirements by the effective date of this rule:

(1) Operational requirements in [327 IAC 19-13](#), except the owner/operator shall comply with [327 IAC 19-13-4](#) within ninety (90) days of the effective date of this rule.

(2) Manure application requirements in [327 IAC 19-14](#).

(3) Manure management plan requirements in [IC 13-18-10-2.3](#), and as described in [327 IAC 19-7-5](#).

(4) Closure requirements in [327 IAC 19-16](#).

(c) An approval amendment is required for an increase in the amount of manure generated that reduces the storage capacity to less than the approved storage capacity at the time of the most recent approval.

(d) Any increase in animal capacity, animal number, or manure containment capacity requires a new application under [IC 13-18-10-1](#) and the requirements therein.

(e) All confined feeding operation approvals issued prior to the effective date of this rule shall expire no later than five (5) years from the effective date of this rule unless a renewal application is submitted in accordance with [327 IAC 19-8-2](#).

(f) A facility that becomes a regulated CFO after the effective date of this article that contains existing waste management systems not previously regulated under this title may be required to modify them to meet the requirements of this article if necessary to protect human health and the environment.

(Water Pollution Control Board; [327 IAC 19-6-1](#))

Rule 7. Application Requirements

[327 IAC 19-7-1](#) Application requirements

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#); [IC 25-17.6](#)

Sec. 1. (a) An application under this rule is required for all CFOs:

- (1) not previously regulated under this title; or
- (2) previously permitted under [327 IAC 5](#) or [327 IAC 15](#) who elect to become subject to this article.

(b) Three (3) copies of the application package, one (1) of which may be electronic, for an approval of a confined feeding operation must be submitted to the commissioner in a format specified by the department.

(c) A complete application package must include all of the following information:

- (1) A completed application on forms provided by the department.
- (2) A plot map as described in section 2 of this rule.
- (3) A farmstead plan as described in section 3 of this rule.
- (4) A waste management system drawing as described in section 4 of this rule.
- (5) A manure management plan as described in section 5 of this rule.
- (6) A mortality management plan as described in section 6 of this rule.
- (7) Soil and water table information from test holes for proposed manure storage facilities that are conducted by a soil scientist certified under the Federation of Certified Boards of Agriculture, Biology, Earth and Environmental Sciences, a professional geologist certified in Indiana under [IC 25-17.6](#), or a professional engineer registered in Indiana. The number of test holes must be sufficient to adequately characterize the seasonal water table and soil. Test holes for concrete manure storage facilities must be at least two (2) feet below the base of the structure. If the manure storage facility is earthen, test holes must be:
 - (A) placed at a rate of two (2) holes for the first acre of storage and one (1) additional hole for each additional half acre of storage;
 - (B) evenly distributed throughout the storage structure;
 - (C) at least five (5) feet below the base of the structure for non-karst areas; or
 - (D) in accordance with [327 IAC 19-12-1\(b\)\(1\)](#) in areas of karst terrain.
- (8) A description of any proposed alternative to a specific requirement in this article to demonstrate equivalent environmental and human health protection in accordance with [327 IAC 19-5](#).
- (9) If applicable, design certification by a registered engineer, as described in [327 IAC 19-12-5\(a\)](#).
- (10) A list of potentially affected parties, including those listed in [IC 13-18-10-2](#), and adjacent landowners.
- (11) A fee of one hundred dollars (\$100), in accordance with [IC 13-18-10-2\(a\)\(5\)](#).
- (12) Other plans or supplemental information that may be required by the commissioner to ensure compliance with this article. The commissioner shall provide written documentation of the basis for requiring any other plans or supplemental information.
- (13) A statement affirming that AFOs adjacent to or contiguous with the CFO are not under common ownership or control of the applicant.
- (14) Copies of any written waivers related to reduction of setback distances.

(d) CFOs that are subject to [IC 13-18-10-1.4](#) must also provide a summary of the most recent soil testing, which must:

- (1) be not more than three (3) years old;
- (2) include phosphorus levels;
- (3) include soil fertility levels; and
- (4) be completed for each parcel of acreage available for manure application after calculation for setbacks based on surface application.

(e) The commissioner may deny an approval application, or place conditions on an approval:

- (1) if the confined feeding operation is, at the time of the approval application or approval decision, not in compliance with water pollution control laws, [IC 13-18](#), or rules promulgated thereunder;
- (2) consistent with [IC 13-18-10-2.1](#);
- (3) if the application is not on a form provided by the department or does not meet the requirements of this article.

(Water Pollution Control Board; [327 IAC 19-7-1](#))

[327 IAC 19-7-2](#) Plot maps

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Sec. 2. (a) The applicant shall submit plot maps of the location proposed for approval consisting of the following:

- (1) A United States Department of Agriculture Natural Resources Conservation Service soil survey map.
- (2) A United States Geological Survey topographical map that includes identification of any public water supply wells and public water supply surface intake structures within one thousand (1,000) feet of the manure storage facilities.

(b) The maps in subsection (a) must be legible and clearly show the following:

- (1) The location of the waste management systems.
- (2) The boundaries of the property of the confined feeding operation.
- (3) The boundaries of all manure application areas.
- (4) Available acreage for manure application after calculation of setbacks using the surface application method.
- (5) The owner of the manure application area.
- (6) The owner of all parcels of the CFO, including all manure storage facilities.

These maps will satisfy the requirement for maps under section 5(a)(3) of this rule.

(Water Pollution Control Board; [327 IAC 19-7-2](#))

[327 IAC 19-7-3](#) Farmstead plan

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 3. (a) A farmstead plan must show all existing and proposed structures, including the approval dates for all existing structures and, within five hundred (500) feet of the waste management systems, the following known features:

- (1) Surface waters of the state.
- (2) Public and private roads.
- (3) Water well locations.
- (4) Characteristics of karst terrain.
- (5) Production area surface drainage patterns.
- (6) Property boundary line.
- (7) All outfalls of known subsurface drainage structures, including perimeter drain outfalls.
- (8) Drainage inlets, including water and sediment control basins.
- (9) Mortality management sites.

(b) In addition to the information required in subsection (a), the farmstead plan must show the diversion of uncontaminated surface water.

(c) The farmstead plan must also show the type and number of animals per structure.

(d) The farmstead plan must be legible and either:

- (1) drawn to approximate scale; or
- (2) show specific distances between the:
 - (A) waste management systems; and
 - (B) features in subsection (a) that are within five hundred (500) feet of the existing or proposed waste management system.

(e) The farmstead plan must contain reference to public roads.

(f) The farmstead plan must indicate any part of the CFO that is in a one hundred (100) year flood plain.

(g) The plan must be submitted on paper not less than eight and one-half (8 1/2) inches by eleven (11) inches in size.

(Water Pollution Control Board; [327 IAC 19-7-3](#))

[327 IAC 19-7-4](#) Waste management system drawing

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 4. The waste management system drawing must show detailed views and necessary cross sections to define all dimensions and construction materials. Systems relying on gravity flow must provide elevations of the entire waste management system that relies on gravity.

(Water Pollution Control Board; [327 IAC 19-7-4](#))

[327 IAC 19-7-5](#) Manure management plan

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 5. (a) A manure management plan must be developed and submitted to the commissioner that contains the following:

- (1) Procedures for soil testing as described in subsection (c).
- (2) Procedures for manure testing as described in subsection (d).
- (3) Plot maps as described in section 2(a)(1) and 2(b) of this rule.
- (4) A land use agreement, which must be for the entire approval term, must include the following:
 - (A) The location of fields.
 - (B) Available acreage after calculation for setbacks based on surface application.
 - (C) The signature of the owner of the property on which manure will be applied.
 - (D) The term of use.
- (5) If applicable, the land application acreage requirements waiver, as described in [327 IAC 19-14-2\(d\)](#).
- (6) Procedures for managing the migration and removal of solids from the manure storage facility, including procedures to ensure required structural integrity and manure storage capacity.

(b) If applicable, the manure management plan must also contain a description of any:

- (1) alternate methods proposed by the applicant for managing of the manure; and
- (2) other practices to be used that assure the confined feeding operation meets the performance standards in this article.

(c) A soil test must be obtained that provides sufficient information about soil fertility to allow for nutrient recommendations for existing or planned crops and to minimize nutrient leaching. The frequency of this testing must be:

- (1) specified in the manure management plan; and
- (2) conducted a minimum of once every three (3) years unless a different frequency is:
 - (A) approved by the department in writing; and
 - (B) included in the manure management plan.

(d) A manure test must be obtained that provides sufficient information about the manure content to allow for nutrient recommendations for existing or planned crops and to minimize nutrient leaching. The frequency of this testing must be:

- (1) specified in the manure management plan; and
- (2) conducted a minimum of once every year.

(e) One (1) manure test must be conducted for each type of manure generated. Manure samples must be representative of the manure that is land applied. Therefore, if manure is mixed from separate manure

storage facilities prior to land application, a composite sample may be taken. If manure is land applied from separate and distinct storage, a sample must be taken from each.

(f) A manure management plan must be submitted to the department at least one (1) time every five (5) years and with any approval application and renewal application to maintain a valid approval for the confined feeding operation. A copy of the current manure management plan must be maintained in the operating record.

(Water Pollution Control Board; [327 IAC 19-7-5](#))

[327 IAC 19-7-6](#) Mortality management plan

Authority: [IC 13-13-5-1](#); [IC 13-15-1-2](#); [IC 13-15-2-1](#)

Affected: [IC 13-18-10](#)

Sec. 6. (a) All CFOs are required to develop a mortality management plan to be submitted with the application package under section 1 of this rule and maintained within the operating record.

(b) Animal burial is prohibited in sensitive areas unless:

- (1) soil borings are done to assure that there is at least two (2) feet of soil between the base of the burial pit and the underlying bedrock and the soil is of a type that will inhibit leaching from the burial pit to ground water; and**
- (2) the results of the soil borings are submitted with the application.**

(c) On sites where animal burial is permitted, burial sites must:

- (1) Be set back at least three hundred (300) feet from:**
 - (A) sinkholes;**
 - (B) any surface water body; or**
 - (C) any water well.**
- (2) Not be located on top of or adjacent to a field tile. If a field tile is encountered, the burial pit must be moved.**
- (3) Not be located in soil types with a Unified Soil Classification of:**
 - (A) Pt;**
 - (B) GW;**
 - (C) GP;**
 - (D) GM;**
 - (E) GC;**
 - (F) SW;**
 - (G) SP;**
 - (H) SM; or**
 - (I) SC.**

(d) Mortality composting sites must:

- (1) Excluding existing structures, be set back at least one hundred (100) feet from:**
 - (A) water wells;**
 - (B) public roads;**
 - (C) property lines;**
 - (D) drainage inlets; and**
 - (E) surface waters.**
- (2) Be constructed and operated to prevent leachate, either through the use of earthen compaction or a concrete pad.**
- (3) Be constructed and operated to prevent run-on and runoff of storm water.**
- (4) Be constructed and operated to prevent access and scavenging by other animals.**

(e) The mortality management plan must include the following:

- (1) A plan for disposal of dead livestock, including primary and secondary means of disposal.**
- (2) A plan for temporary storage, if used, and how the temporary storage area will be designed and**

operated to control runoff from the area.

(3) A discussion of how mortality composting sites will meet the design and performance standards of this section.

(Water Pollution Control Board; [327 IAC 19-7-6](#))

Rule 8. Approval Process

[327 IAC 19-8-1](#) Duration of approvals

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 1. An approval and approval renewal shall be effective for a fixed term. That term begins when the approval or approval renewal is issued and is not to exceed five (5) years. An approval may be amended, revoked and reissued, or revoked prior to the expiration of the term for cause, as specified in sections 3 and 5 of this rule, or in accordance with conditions set forth in the approval. In no event may the term of an approval be extended beyond five (5) years from its original effective date by amendment, extension, or other means, except as provided in section 2(a) of this rule.

(Water Pollution Control Board; [327 IAC 19-8-1](#))

[327 IAC 19-8-2](#) Approval renewals

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 4-21.5](#); [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10-2.3](#); [IC 13-30-3](#)

Sec. 2. (a) If the owner/operator wishes to continue the activity regulated by the approval after the expiration date of the approval, the owner/operator shall apply for and obtain an approval renewal. The terms and conditions of an expired approval are automatically extended in full force and effect until the effective date of a renewal, if the:

- (1) owner/operator has submitted a timely and complete application for an approval renewal under this article at least thirty (30) days prior to the expiration of the approval; and
- (2) commissioner, through no fault of the owner/operator, does not issue an approval renewal prior to the expiration date of the previous approval.

(b) In accordance with [IC 13-18-10-2.3](#), an updated manure management plan must be submitted once every five (5) years, along with the additional information required in subsection (c), at least thirty (30) days prior to the expiration of the approval. Approval renewals shall be issued for a fixed term not to exceed five (5) years. A confined feeding operation that has had a discharge within the previous five (5) years that was, or is subject to an enforcement action by the department under [IC 13-30-3](#) shall be subject to public notice requirements in section 7 of this rule upon receipt of a complete renewal application by the department. A confined feeding operation that has not had a discharge within the previous five (5) years that was, or is subject to an enforcement action by the department under [IC 13-30-3](#) shall be considered to have a new approval renewal upon receipt of a complete approval renewal application by the department.

(c) The application for approval renewal must contain the following:

- (1) The name, full address, phone number, and contact person for the confined feeding operation.
- (2) An updated manure management plan in accordance with [327 IAC 19-7-5](#).
- (3) If any information from the original application has changed, or is proposed to be changed, then updates of any applicable items in [327 IAC 19-7-1\(c\)](#).
- (4) A farmstead plan, as described in [327 IAC 19-7-3](#).
- (5) A mortality management plan, as described in [327 IAC 19-7-6](#), unless previously submitted to the department.
- (6) A minimum number of acres for manure application, as described in [327 IAC 19-14-2\(a\)](#).

(Water Pollution Control Board; [327 IAC 19-8-2](#))

[327 IAC 19-8-3](#) Amendments and notifications

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15-7-1](#); [IC 13-18-10-2.1](#); [IC 13-30](#)

Sec. 3. (a) The department may issue amendments to approvals of a confined feeding operation at any time:

- (1) under [IC 13-18-10-2.1](#)(i);
- (2) at the request of the applicant to address changes at the confined feeding operation that do not require a new approval; or
- (3) due to a reduction in storage capacity that results in less storage capacity than the amount that is stated in the current approval.

(b) The owner/operator must submit written notification to the department of any changes to the operation as approved. The department will review the changes and decide if amendments are necessary. At any time the department may decide an amendment is necessary, and the owner/operator must comply with the amended approval.

(Water Pollution Control Board; [327 IAC 19-8-3](#))

[327 IAC 19-8-4](#) Denials

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 4. (a) Denial of an application shall result from failure to:

- (1) be in compliance with all current approval conditions during departmental review; or
- (2) submit a complete application after receipt of two (2) notices of deficiency on the new or renewal application.

(b) All CFOs are subject to [327 IAC 19-7-1](#)(e), as well as the conditions listed in this section.

(Water Pollution Control Board; [327 IAC 19-8-4](#))

[327 IAC 19-8-5](#) Revocation

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10](#); [IC 13-30-3-11](#)

Sec. 5. (a) The commissioner may revoke an approval or a condition of an approval as a result of a violation of:

- (1) water pollution control laws;
- (2) rules adopted under the water pollution control laws;
- (3) [IC 13-18-10](#);
- (4) this article; or
- (5) approval conditions.

(b) The commissioner may revoke an approval or condition or modify the terms of an approval through an order of the commissioner under [IC 13-30-3-11](#).

(c) The commissioner shall provide written documentation of the basis for revoking an approval or a condition of an approval.

(d) Revocation of approval may happen at any time a violation is discovered, regardless of when the violation actually occurred.

(Water Pollution Control Board; [327 IAC 19-8-5](#))

[327 IAC 19-8-6](#) Transferability

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 6. (a) When ownership of a CFO is transferred, the parties completing the transaction shall request transfer of the approval from the department. This request must include a written agreement that is submitted to the commissioner containing the following:

- (1) A specific date for transfer of approval responsibilities.
- (2) Identification of responsibility for any violations existing at the time of the transfer.

(b) Failure to comply with subsection (a) may result in the following:

- (1) Revocation of the existing CFO approval and possible penalties for operating without a valid approval.
- (2) The necessity of the new owner or operator to submit an application for a new approval under [327 IAC 19-7-1](#).

(Water Pollution Control Board; [327 IAC 19-8-6](#))

[327 IAC 19-8-7](#) Public comment periods and notifications

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10-1](#); [IC 13-30](#)

Sec. 7. (a) An applicant who applies for approval under [IC 13-18-10-1](#) to construct or expand a confined feeding operation on land for which a valid existing approval has not been issued shall make a reasonable effort to provide notice not more than ten (10) working days after submitting an application:

- (1) to the county executive of the county in which the confined feeding operation is to be located or expanded; and
- (2) to each owner and each occupant of land of which any part of the boundary is one-half (1/2) mile or less from the following:
 - (A) Any part of the proposed footprint of either or both of the following to be located on the land on which the confined feeding operation is to be located:
 - (i) A livestock or poultry production structure.
 - (ii) A permanent manure storage facility.
 - (B) Any part of the proposed footprint of either or both of the following to be located on the land on which the confined feeding operation is to be expanded:
 - (i) A livestock or poultry production structure.
 - (ii) The expanded area of a livestock or poultry production structure.

The notice must be completed on a state form, sent by mail, be in writing, include the date on which the application was submitted to the department, and include a brief description of the subject of the application. The notice must also include the dates comments will be accepted by the department in subsection (b). The applicant shall pay the cost of complying with this subsection. The applicant shall submit an affidavit to the department that certifies that the applicant has complied with this subsection, as well as submit a copy of the state form to the department that was sent to persons in this subsection.

(b) The department shall accept written comments for a forty (40) day period following the submittal of an application under [327 IAC 19-7-1](#).

(c) A public meeting on an approval application may be held at the commissioner's discretion in appropriate cases where environmental concerns relevant to applicable rules or laws are raised.

Rule 9. Operating Record

[327 IAC 19-9-1](#) Requirements

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 1. (a) All valid approvals, amendments, renewals, and notifications relevant to the approvals must be:

- (1) added to the operating record in accordance with required time frames established in this article and [IC 13-18-10](#); and
- (2) maintained and updated in the operating record.

(b) The operating record must also contain all records from the following, if applicable:

- (1) [327 IAC 19-7-1](#), all requirements within the current version of the complete application.
- (2) [327 IAC 19-7-3](#), the farmstead plan.
- (3) [327 IAC 19-7-5](#), the manure management plan.
- (4) [327 IAC 19-7-6](#), the mortality management plan.
- (5) [327 IAC 19-10](#), a ground water monitoring plan.
- (6) [327 IAC 19-11](#), the storm water pollution prevention plan.
- (7) [327 IAC 19-12-4\(f\)](#) and [327 IAC 19-12-4\(g\)](#), regarding construction requirements.
- (8) [327 IAC 19-13-1\(d\)](#), regarding completed self-monitoring records for five (5) years.
- (9) [327 IAC 19-13-4](#), the current emergency spill response plan, and documentation of any spill response implemented by confined feeding operation personnel within the past five (5) years.
- (10) [327 IAC 19-14-2\(a\)](#), regarding minimum acreage records.
- (11) [327 IAC 19-14-3\(e\)](#), regarding land application records for five (5) years.
- (12) [327 IAC 19-14-5](#), a spray irrigation plan.
- (13) [327 IAC 19-14-7\(c\)](#), regarding marketing and distribution records for five (5) years.
- (14) Soil and manure tests must be obtained that provide sufficient information about soil fertility to allow for nutrient recommendations for existing or planned crops and to minimize nutrient leaching.
- (15) Documentation of maintenance activities on manure storage facilities.
- (16) Copies of any written waivers related to reduction of the set back distances.
- (17) All required permits.

(Water Pollution Control Board; [327 IAC 19-9-1](#))

Rule 10. Ground Water Monitoring

[327 IAC 19-10-1](#) Ground water monitoring

Authority: [IC 13-13-5-1](#); [IC 13-15-1-2](#); [IC 13-15-2-1](#)

Affected: [IC 13-18-10](#)

Sec. 1. (a) All CFOs required to conduct ground water monitoring must comply with the requirements of this section.

(b) Owners/operators of a manure storage facility shall develop and follow a written ground water monitoring plan. This plan must:

- (1) be approved by the department;
- (2) be kept in the operating record; and
- (3) include:
 - (A) monitoring parameters, including:
 - (i) field pH;

- (ii) field specific conductance;
- (iii) ammonia-N;
- (iv) chloride;
- (v) fecal coliform bacteria;
- (vi) nitrate-N;
- (vii) phosphate;
- (viii) sulfate; and
- (ix) total organic carbon;
- (B) monitoring frequency;
- (C) sample collection method and identification;
- (D) sample preservation and shipment, including field quality control;
- (E) analytical procedures, including:
 - (i) method detection limits; and
 - (ii) practical quantitation limits;
- (F) chain of custody control; and
- (G) a description of how the owner/operator shall determine whether there is a statistically significant increase over background values for each parameter monitored, with the exception of field pH and field specific conductance. The owner/operator shall make these statistical determinations each time the owner/operator collects samples.

(c) If the owner/operator determines under subsection (b)(3)(G) that there is a statistically significant increase for parameters at any monitoring device, the owner/operator shall notify the commissioner of this finding in writing within fourteen (14) days. The notification must indicate what parameters have shown statistically significant increases over background levels. The department may then require corrective action.

(d) Owners/operators must submit the results of ground water monitoring to the department within sixty (60) days of sampling.

(e) Required monitoring must be conducted throughout the active life of the storage facility. Ground water monitoring may be extended beyond the active life of the manure storage facility if a corrective action program is being conducted at the facility.

(Water Pollution Control Board; [327 IAC 19-10-1](#))

Rule 11. Storm Water Pollution Prevention Plan

[327 IAC 19-11-1](#) General requirements of the storm water pollution prevention plan

Authority: [IC 13-13-5-1](#); [IC 13-15-1-2](#); [IC 13-15-2-1](#)

Affected: [IC 13-18-10](#)

Sec. 1. (a) A storm water pollution prevention plan (SWP3) shall be developed in accordance with this rule to document storm water management at the facility.

(b) The SWP3 should be reviewed periodically for changes and improvements at the facility. At a minimum, this review should be conducted annually.

(c) A storm water pollution prevention plan must be as follows:

(1) Maintained in the operating record described in [327 IAC 19-9](#).

(2) Amended as necessary in accordance with section 3 of this rule.

(3) Developed prior to populating, unless the CFO:

(A) has been previously regulated under this title; or

(B) becomes a regulated CFO after the effective date of this article and contains existing waste management systems not previously regulated under this title.

Then the SWP3 must be developed within one hundred eighty (180) days of the effective date of this article.

[327 IAC 19-11-2](#) Contents

Authority: [IC 13-13-5-1](#); [IC 13-15-1-2](#); [IC 13-15-2-1](#)

Affected: [IC 13-18-10](#)

Sec. 2. A storm water pollution prevention plan must include the following:

- (1) The facility name and contact information.
- (2) Receiving water or waters of storm water from the production facility.
- (3) A map of the facility. The farmstead plan, as described in [327 IAC 19-7-3](#) will satisfy this requirement.
- (4) A description of potential pollutant sources, including the following:
 - (A) All activities and significant materials that may reasonably be expected to add significant amounts of pollutants to storm water draining from the facility.
 - (B) A description of the potential pollutant sources from the following activities:
 - (i) Immediate access roads and rail lines used or traveled by carriers of raw materials, waste material, or byproducts used or created by the facility.
 - (ii) Refuse sites.
 - (iii) Sites used for the storage and maintenance of material handling equipment.
 - (iv) Shipping and receiving areas.

The description should specifically list any significant potential source of pollutants at the site.

- (C) An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. The inventory should include a description of the following:
 - (i) Materials that are treated, stored, or disposed of in a manner to allow exposure to storm water where that exposure releases contaminants into the storm water.
 - (ii) The method and location of on-site storage or disposal of significant materials.
 - (iii) Paved, dirt, or gravel parking areas for storage of vehicles to be maintained.
 - (iv) Materials management practices employed to minimize contact of materials with storm water runoff.
 - (v) The location and description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff.
 - (vi) A description of any treatment the storm water receives, including the ultimate disposal of any solid or fluid wastes other than by discharge.
- (5) A description of storm water management controls, which shall include the following, with an implementation schedule for each where appropriate:
 - (A) Good housekeeping. All areas that may contribute pollutants to storm water discharges should be maintained in a clean, orderly manner.
 - (B) Preventative maintenance. A preventative maintenance program including timely inspection and maintenance schedule of storm water management devices.
 - (C) Inspections. Self-monitoring inspections conducted as permit conditions require including records of inspection of storm water control devices and measures implemented. Records of inspection shall be maintained in the farm operating record.
 - (D) Sediment and erosion control. The plan should identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.
 - (E) Management of storm water runoff. A discussion of practices (other than those that control the generation or source or sources of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff so as to reduce pollutants in storm water discharges from the site.
- (6) A monitoring plan that shall:
 - (A) demonstrate the effectiveness of the storm water pollution prevention practices; and
 - (B) include methods to quantify sediment and nutrient loadings in storm water discharges including:
 - (i) total suspended solids (TSS);
 - (ii) ammonia (NH⁴⁺); and
 - (iii) biological oxygen demand (BOD).
- (7) Sampling of storm water that shall be:
 - (A) conducted annually;
 - (B) conducted on each representative storm water outfall; and
 - (C) collected from the discharge resulting from a storm event that is greater than one-tenth (0.1) of

an inch and at least seventy-two (72) hours from the previous storm event that was greater than one-tenth (0.1) of an inch.

(8) The results from the storm water sampling conducted in subdivision (7).

(Water Pollution Control Board; [327 IAC 19-11-2](#))

[327 IAC 19-11-3](#) Amending the storm water pollution prevention plan

Authority: [IC 13-13-5-1](#); [IC 13-15-1-2](#); [IC 13-15-2-1](#)

Affected: [IC 13-18-10](#)

Sec. 3. (a) The storm water pollution prevention plan (SWP3) must be amended whenever:

- (1) there is a change in design, construction, operation, or maintenance at the facility that will have or has the potential to have a significant effect on the potential for the discharge of pollutants;
- (2) notice is received from the commissioner stating that the SWP3 is deficient in achieving the general objectives of controlling pollutants in storm water discharges. The notice shall list the deficiencies of the SWP3; or
- (3) the implemented storm water pollution prevention practices are deemed ineffective by the owner or operator.

(b) Appropriate practices and measures should be modified, implemented, and documented in the amended SWP3.

(Water Pollution Control Board; [327 IAC 19-11-3](#))

Rule 12. Manure Handling and Storage; Site, Design, and Construction Requirements for Waste Management Systems

[327 IAC 19-12-1](#) Site restrictions

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 1. (a) Waste management systems must not be constructed:

- (1) except for subsection (b), in karst terrain based on information compiled by the department, and from karst and bedrock maps from the Indiana Geological Survey dated 1997;
- (2) in a floodway;
- (3) in a one hundred (100) year flood plain, unless all waste management system access is at least two (2) feet above the one hundred (100) year flood plain and structurally sound without lowering of the seasonal water table;
- (4) over mines; or
- (5) in soil that is expected to be in the seasonal high water table, unless the water table is lowered to keep the water table below the bottom of the waste management system.

(b) The commissioner may approve a waste management system to be constructed in karst terrain based upon the following site-specific information submitted to the commissioner:

- (1) Characterization of the seasonal water table and soil.
- (2) Design and construction specifications that assure adequate structural integrity and environmental protection.
- (3) For manure storage facilities that are earthen, in addition to [327 IAC 19-7-1\(c\)\(7\)](#), information from at least one (1) of the soil borings or test holes to the shallower of either:
 - (A) bedrock; or
 - (B) ten (10) feet below the lowest point of the proposed waste management system.
- (4) Other information that the commissioner deems necessary to ensure protection of human health and the environment.

(Water Pollution Control Board; [327 IAC 19-12-1](#))

327 IAC 19-12-2 Setbacks

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 2. (a) For purposes of this section, waste management systems must use the largest setback that is applicable.

(b) Waste management systems must be located to maintain the minimum setback distances from the following features that are known and identifiable at the time of application:

- (1) One thousand (1,000) feet from a public water supply well or public water supply surface intake structure.
- (2) Except for subsection (c), three hundred (300) feet from:
 - (A) surface waters of the state;
 - (B) drainage inlets, including water and sediment control basins;
 - (C) sinkholes, as measured from the surficial opening or the lowest point of the feature; and
 - (D) off-site water wells.
- (3) Four hundred (400) feet from existing off-site residential and public buildings.
- (4) One hundred (100) feet from:
 - (A) on-site water wells;
 - (B) property lines; and
 - (C) public roads.

(c) A manure storage facility that contains solids must be maintained to have a minimum setback of one hundred (100) feet from the features in subsection (b)(2).

(d) If one (1) of the features in subsection (b) is constructed within the specified setback distance in subsection (b), then a waste management system may be constructed no closer to the feature than the distance between the original waste management system and the feature, providing that the feature was:

- (1) not under the control of the owner/operator of the confined feeding operation; and
- (2) constructed after the application for original waste management system was submitted to the department.

(e) The owner/operator may obtain a reduced setback under [327 IAC 19-5](#) by demonstrating to the commissioner that a different compliance approach meets the performance standards in [327 IAC 19-3-1](#).

(Water Pollution Control Board; [327 IAC 19-12-2](#))

327 IAC 19-12-3 Storage capacity and design requirements for all manure storage facilities

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 3. (a) All manure storage facilities for the confined feeding operation must be designed, constructed, and maintained with a combined storage capacity of at least one hundred eighty (180) days storage for the following:

- (1) Manure.
- (2) Waste liquids.
- (3) Waste from cooling systems (misterters, plate coolers, etc.).
- (4) Water tank wastes.
- (5) Net average rainfall.
- (6) Accumulated solids.
- (7) Normal runoff.
- (8) If applicable, the expected precipitation and runoff from a twenty-five (25) year, twenty-four (24) hour precipitation event that falls on the drainage area around the manure storage facility that contains liquid.

(b) All manure storage facilities must be as follows:

- (1) Constructed to minimize leaks and seepage and prevent spills that could contaminate ground water or surface water.**
- (2) Designed to handle the runoff from a twenty-five (25) year, twenty-four (24) hour precipitation event on the entire production area.**

(c) For any uncovered manure storage facilities, the design must include a minimum of two (2) feet of freeboard, measured from the lowest point of the top of the manure storage facility, to include the expected precipitation from a twenty-five (25) year, twenty-four (24) hour precipitation event that falls directly on the area draining into the structure. Manure storage facilities must have clearly identified markers to indicate the required freeboard, and that freeboard must be maintained, recorded, and kept in the operating record.

(d) Manure storage facilities may not be constructed in sand or gravel soils, Unified Soil Classification of Pt, GW, GP, GM, GC, SW, SP, SM, SC, unless specially designed with an approved liner, in accordance with section 5 of this rule.

(e) The base of a manure storage facility must be above bedrock as follows:

- (1) If not in karst terrain, the base must be at least two (2) feet above bedrock.**
- (2) If in karst terrain, the base must be at least five (5) feet above bedrock, unless additional distance is determined by the commissioner based on information provided under section 1(b) of this rule.**

(f) Manure storage facilities made out of concrete must meet the following requirements:

- (1) Be designed and constructed according to the Midwest plan services guidance for Rectangular Concrete Manure Storages, 2005 Edition unless otherwise designed and certified by a registered professional engineer and submitted in writing to the department.**
- (2) The slab/floor of the structure must be at least five (5) inches thick.**
- (3) The bearing capacity of the soil beneath the concrete structure must be at least two thousand (2,000) pounds per square foot (psf).**
- (4) The concrete must be constructed according to the NRCS standard: Construction Specification, Concrete Construction, October 2005 Edition.**

(g) CFOs that use sand bedding or other solids that can migrate into the manure storage facility must design the manure storage facility to account for reduced storage capacity due to migration of sands or solids.

(h) The commissioner may incorporate conditions into the approval that require testing to verify that the manure storage facility is consistent with the design and performance standards established in this article.

(Water Pollution Control Board; [327 IAC 19-12-3](#))

[327 IAC 19-12-4](#) Design and construction requirements for all waste management systems

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 4. (a) All waste management systems must be designed to not discharge to surface waters of the state. If a waste management system discharges or is designed to discharge, a NPDES CAFO permit under 40 CFR 122.23 is required.

(b) Any drainage system to lower a seasonal water table around the base of a waste management system must be equipped with an access point for sampling within fifty (50) feet of the waste management system.

(c) Any drainage system to lower the seasonal water table around the base of a waste management system must be designed and installed to:

- (1) effectively collect and drain the ground water;
- (2) be of adequate size, proper slopes, and proper distance from the waste management system;
- (3) be provided with sumps, pumps (including a backup pump), and electricity supply, if applicable;
- (4) have an outlet that is at least fifty (50) feet away from the building, and at least:
 - (A) fifty (50) feet from the property line in soils with a permeability of one-half (1/2) inch per hour or less; or
 - (B) twenty (20) feet from the property line in soils with a permeability greater than one-half (1/2) inch per hour; and
- (5) have a shut-off valve or equivalent.

(d) Any field tiles or drainage outlets encountered during construction must be cut back at least fifty (50) feet from the edge of a berm or concrete pit or earthen structure and blocked or rerouted.

(e) Except for prefabricated tanks, a construction quality assurance plan detailing the design, specifications for the materials of construction, and supporting calculations and documentation for the adequacy of manure storage facilities must be developed and certified by a registered professional engineer and submitted to the department.

(f) The owner/operator shall notify the commissioner in writing fourteen (14) days prior to scheduled construction of a waste management system. If an owner/operator completes construction of an approved waste management system and wishes to utilize that portion prior to finishing construction of the entire facility, multiple notices shall be submitted.

(g) The applicant shall execute and send to the commissioner an affidavit, under penalty of perjury, that a waste management system was constructed, and shall be operated, in accordance with the requirements of the approval and this article. The owner/operator must submit to IDEM, on a form provided by the department, the affidavit within thirty (30) days after the date construction of an approved waste management structure is completed, and prior to the introduction of any animals or manure. The affidavit must be completed, notarized, and returned to IDEM assuring that the waste management system was constructed and shall be operated in accordance with the requirements of the approval. The affidavit must also include identification of what parts of the waste management system are completed at the time of submittal. If an owner/operator performs partial construction of an approved facility and wishes to utilize that portion prior to completing construction of the entire facility, multiple affidavits shall be submitted. No portion of a waste management system, including animal feed and similar feedstock storage areas, shall be utilized unless that portion, or a combination of the waste management system for that portion, is completely constructed prior to the introduction of animals and provides a minimum of one hundred eighty (180) days storage for manure, wastewater, and/or leachate.

(Water Pollution Control Board; [327 IAC 19-12-4](#))

[327 IAC 19-12-5](#) Design requirements for liners

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 5. (a) The design for liners used in manure storage facilities must be developed and certified by a registered professional engineer and included in the approval application under [327 IAC 19-7-1\(c\)\(9\)](#).

(b) Liners used in manure storage facilities must meet the following design standards:

(1) Liners for facilities with at least ten (10) feet of one (1) of the soils listed in subdivision (5) immediately below the facility must:

- (A) be constructed of at least two (2) feet of soil with a hydraulic conductivity of 1×10^{-7} cm/sec or less; and
- (B) have a seepage rate that does not exceed one fifty-sixth (1/56) cubic inch per square inch area per day.

(2) Liners for facilities with less than ten (10) feet, but five (5) or more feet of one (1) of the soils listed in subdivision (5) immediately below the facility must:

(A) meet the requirements in subdivision (1)(A); and

(B) have a minimum forty (40) millimeters thick geomembrane, such as a high density polyethylene (HDPE) or polyvinyl chloride (PVC).

(3) Liners for facilities with less than five (5) feet of one (1) of the soils listed in subdivision (5) immediately below the facility must:

(A) meet the requirements in subdivision (2); and

(B) conduct ground water monitoring in accordance with [327 IAC 19-10](#).

(4) All soil liner construction must be composed of lifts compacted to at least ninety-five percent (95%) of maximum standard proctor density with a maximum compacted lift thickness of six (6) inches.

(5) The clay type soils that may be used for the construction of the structure must be of a Unified Soil Classification of ML, CL, MH, CH, or OH.

(6) Liners in highly permeable soils with the Unified Soil Classification of Pt, GW, GP, GM, GC, SW, SP, SM, or SC must be composed of both a compacted clay liner under subdivision (1)(A) and a geomembrane liner under subdivision (2)(B).

(c) If geomembrane or geosynthetic liners are used, means of preventing gas buildup below and between the liner systems must be addressed.

(Water Pollution Control Board; [327 IAC 19-12-5](#))

[327 IAC 19-12-6](#) Design requirements for other waste management systems

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 6. (a) Installation of underground steel storage tanks for manure is prohibited.

(b) Plastic and fiberglass tanks and aboveground steel tanks must comply with the following:

(1) Tanks must have sufficient strength to withstand design loads.

(2) All tanks must be watertight.

(3) Tanks used to store other substances must be cleaned to remove any traces of other chemicals prior to addition of manure to the tank.

(4) Tanks must be designed and installed to ensure the seasonal high water table is maintained below the tank or the tank must be anchored to prevent flotation.

(5) Aboveground tanks must have protected shut-off valves for all inlet and outlet pipes.

(c) Vegetative management systems are prohibited in soils with a Unified Soil Classification of:

(1) Pt;

(2) GW;

(3) GP;

(4) GM;

(5) GC;

(6) SW;

(7) SP;

(8) SM; or

(9) SC.

(d) A settling basin, low velocity channel, or equivalent structure must be provided between the vegetative management system and the source of contaminated storm water runoff. A constructed settling basin or low velocity channel designed for the one (1) year, one (1) hour precipitation event must have sufficient capacity to store the contaminated storm water runoff and the expected sediment.

(Water Pollution Control Board; [327 IAC 19-12-6](#))

Rule 13. Manure Handling and Storage; Operational Requirements

327 IAC 19-13-1 Maintenance requirements

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 1. (a) All waste management systems and application equipment must be maintained and operated to meet the approval conditions.

(b) Management of liquid and solid manure must be in compliance with the following:

- (1)** This article.
- (2)** The confined feeding operation approval.
- (3)** All applicable state and federal laws.

(c) Manure must be in an approved manure storage facility until removed for land application in accordance with [327 IAC 19-14](#).

(d) The owner/operator shall inspect all waste management systems for compliance with this article and the approval conditions and, if applicable, freeboard measures as specified in [327 IAC 19-12-3\(c\)](#) or the approval, at least one (1) time each week. Completed self-monitoring records must be kept in the operating record.

(e) All earthen berms for manure storage facilities must be:

- (1)** stabilized with vegetation or alternative erosion control measures; and
- (2)** maintained to allow for visual inspection and prevent growth of trees and shrubs.

(f) An owner/operator with an approved vegetative management system must operate and maintain the vegetative management system to provide effective treatment in accordance with the approval.

(g) Migration of solids from contaminated runoff from any feedlot is prohibited unless directed to an approved manure storage facility.

(h) Field tile outlets must be field sampled annually for ammonia (NH³).

(Water Pollution Control Board; [327 IAC 19-13-1](#))

327 IAC 19-13-2 Digesters and other energy recovery systems

Authority: [IC 13-14-8-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14-12](#); [IC 13-18](#); [IC 13-30](#)

Sec. 2. Any manure digester or energy recovery system must obtain applicable registrations from the department's solid waste program.

(Water Pollution Control Board; [327 IAC 19-13-2](#))

327 IAC 19-13-3 Transport and handling

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 3. Pumping, dumping, or allowing the leakage or drainage of manure from a vehicle, tank, or wagon used to move manure onto unauthorized premises, public thoroughfares, or into waters of the state is prohibited.

(Water Pollution Control Board; [327 IAC 19-13-3](#))

[327 IAC 19-13-4](#) Emergency spill response plan

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 4. (a) The owner/operator of a confined feeding operation shall develop an emergency spill response plan to be kept in the operating record. The plan shall contain the following:

(1) Procedures for the following, if possible:

(A) Containing the spill to prevent it from reaching waters of the state.

(B) Locating the source of the spill and stopping the flow of manure or waste liquids.

(C) Returning spilled manure or waste liquids to an approved waste management system.

(D) Contacting the following:

(i) The owner/operator.

(ii) Any applicable local emergency or health authorities.

(2) The names and telephone numbers of persons who are identified by the owner/operator as responsible for implementing the emergency spill response plan.

(3) Areas where potential spills can occur and their accompanying drainage points.

(4) Identification of equipment and cleanup materials to be used in the event of a spill.

(b) If a reportable spill reaches waters of the state, the following procedures, under [327 IAC 2-6.1-7](#), must be followed:

(1) As soon as possible, but within two (2) hours of discovery, communicate a spill report to the department of environmental management, office of land quality, emergency response section: area code 1-888-233-7745 for in-state calls (toll free) or (317) 233-7745 for out-of-state calls. If new or updated spill report information becomes known that indicates a significant increase in the likelihood of damage to the waters of the state, the responsible party shall notify the department as soon as possible but within two (2) hours of the time the new or updated information becomes known.

(2) Submit to the Indiana Department of Environmental Management, Office of Land Quality, Emergency Response Section (MC 66-30), 2525 N. Shadeland Ave., Suite 100, Indianapolis, IN 46219-1787, a written copy of the spill report if requested in writing by the department.

(3) Except from modes of transportation other than pipelines, exercise due diligence and document attempts to notify the following:

(A) For spills to surface water that cause damage, the nearest affected downstream water user located within ten (10) miles of the spill and in the state of Indiana.

(B) For spills to soil outside the facility boundary, the affected property owner or owners, operator or operators, or occupant or occupants.

(Water Pollution Control Board; [327 IAC 19-13-4](#))

Rule 14. Land Application of Manure

[327 IAC 19-14-1](#) Applicability

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 1. Land application of manure, litter, or process wastewater to land that is:

(1) owned by the permittee;

(2) rented by the permittee; or

(3) utilized by the permittee under an agreement for land use;

shall be done in accordance with the requirements of this rule.

(Water Pollution Control Board; [327 IAC 19-14-1](#))

327 IAC 19-14-2 Required acreage for manure application

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 2. (a) All CFOs must maintain a minimum number of acres for manure application based on manure application rates from section 3 of this rule. This must be:

- (1) documented in the operating record at all times; and
- (2) included in all applications, except applications for new CFOs.

(b) Any acreage utilized for the application of manure that is not owned by the owner of the confined feeding operation must be documented in the operating record via land use agreements as described in [327 IAC 19-7-5\(a\)\(4\)](#).

(c) If the applicant can demonstrate to the satisfaction of the commissioner that a smaller amount of acreage can be used and is equally protective of human health and the environment, the commissioner may approve the different amount of acreage based on site-specific criteria submitted with the application package, including:

- (1) type of manure generated;
- (2) alternate methods of managing manure;
- (3) innovative technology;
- (4) the marketing and distribution of manure as described in [327 IAC 19-13-5](#); or
- (5) other criteria related to protection of human health or the environment.

(d) Copies of any written waivers related to reduction of the property line setback distances must be kept in the operating record.

(Water Pollution Control Board; [327 IAC 19-14-2](#))

327 IAC 19-14-3 Manure application rates

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18-10](#); [IC 13-30](#)

Sec. 3. (a) The owner/operator of a confined feeding operation shall have the results of a soil test prior to any land application events, as well as a manure test. The tests shall be conducted in accordance with the manure management plan that is submitted to the commissioner to meet the requirement in [327 IAC 19-7-1\(c\)\(7\)](#).

(b) The agronomic rate for potentially available nitrogen must not exceed the nitrogen (N) requirements of current or planned crops of the upcoming growing season as documented in the operating record.

(c) Available phosphorus (P) applications from all sources shall be based on the following soil test P values:

- (1) Less than fifty (50) parts per million (ppm) soil test P: nutrient application rates allowed up to the N needs of the existing or following crop to be grown.
- (2) Fifty (50) to one hundred (100) ppm soil test P: P application shall not exceed one and one-half (1.5) times the total crop P removal for the existing or proposed crop to be grown.
- (3) Greater than one hundred (100) ppm soil test P: eliminate P applications, if possible; otherwise P application shall not exceed the existing or proposed crop P removal rate.

(d) Acreage that has a soil test P level at or exceeding two hundred (200) ppm may comply with the following phase-in schedule, which begins with the effective date of this article:

- (1) Years one (1) through three (3) application rates may continue to be the nitrogen limiting rate in subsection (b).

(2) After year three (3), the application rate must be phosphorus limiting in accordance with this subsection (c).

(e) The following information must be added to the operating record as needed in accordance with required time frames established in this article and [IC 13-18-10](#) and must be maintained and updated in the operating record:

- (1) Expected crop yields.
- (2) The date or dates manure, litter, or process wastewater is applied to each field.
- (3) Precipitation events at the time of application and for twenty-four (24) hours prior to and following application.
- (4) Test methods used to sample and analyze manure, litter, process wastewater, and soil.
- (5) Results from manure, litter, process wastewater, and soil sampling.
- (6) An explanation of the basis for determining manure, litter, and process wastewater application rates.
- (7) Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than manure, litter, or process wastewater.
- (8) Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied.
- (9) The method used to apply the manure, litter, or process wastewater.
- (10) The date or dates of manure, litter, and process wastewater application equipment inspection.
- (11) USDA soil survey maps of currently available land application sites.
- (12) The type of manure applied.
- (13) A written conservation plan with an explanation of conservation practices used must be completed and implemented prior to land application on highly erodible land, if required in section 4(f) of this rule.

(Water Pollution Control Board; [327 IAC 19-14-3](#))

[327 IAC 19-14-4](#) Manure application activities

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 4. (a) Manure that is staged at the manure application site for more than twenty-four (24) hours must be:

- (1) covered or adequately bermed to prevent run-on or runoff;
- (2) applied to the site within ninety (90) days;
- (3) set back from property lines and public roads one hundred (100) feet; and
- (4) set back from residential buildings four hundred (400) feet.

(b) Staging of solid manure at the manure application site is prohibited:

- (1) within three hundred (300) feet of surface waters of the state, drainage inlets, including water and sediment control basins, or water wells unless there is a:
 - (A) barrier; or
 - (B) surface gradient that contains or directs any contaminated runoff away from the waters of the state, drainage inlets, including water and sediment control basins, or water wells;
- (2) on any area with a slope greater than six percent (6%), unless run-on and runoff is controlled; or
- (3) on any standing water, waterway, or flood plain.

(c) Solid manure, litter, or contaminated bedding may not be placed outside of any approved manure storage facility at the confined feeding operation overnight or during inclement weather.

(d) The amount of manure staged cannot exceed the volume that is required for land application on that field.

(e) The following manure application activities are prohibited:

- (1) Manure to frozen or snow covered ground.
- (2) Manure to saturated ground.

(3) Manure from manure application equipment operating on a public road.**(f) Liquid or solid manure must not be applied to highly erodible land unless:**

- (1) the land has residue protection or crop cover; or**
- (2) it is applied in accordance with a conservation plan described in section 3(e)(13) of this rule.**

(g) Any manure application that causes a water quality violation:

- (1) is a violation of this article; and**
- (2) will result in enforcement action.**

*(Water Pollution Control Board; [327 IAC 19-14-4](#))***[327 IAC 19-14-5](#) Spray irrigation****Authority:** [IC 13-13-5-1](#); [IC 13-15-1-2](#); [IC 13-15-2-1](#)**Affected:** [IC 13-18-10](#)

Sec. 5. (a) Spray irrigation of liquid manure and process wastewater must be conducted to prevent equipment leaks and excessive application. Application is deemed excessive when the application rate exceeds the infiltration rate of the soil where the application is occurring, expressed in inches per hour.

(b) Application must be conducted:

- (1) under the constant supervision of a person; or**
- (2) with devices to detect pressure loss due to leaks and devices to shut down the system if leaks are detected.**

(c) Manure and process wastewater must not be applied by spray irrigation to any land that has less than twenty (20) inches of soil above the bedrock.

(d) Spray irrigation in a flood plain is prohibited unless the following conditions are met:

- (1) The setback from surface water is increased to two hundred (200) feet.**
- (2) Spraying is only done during months that the current county soil survey book indicates have a low potential for flooding.**
- (3) There is no expectation of flooding, based on:**
 - (A) available weather forecast information; and**
 - (B) rainfall or flood conditions upstream within the drainage basin.**
- (4) A spray irrigation plan is completed, which must be kept in the operating record and includes the following:**
 - (A) A map of the flood plain area.**
 - (B) A timeline of when the spraying will occur.**
 - (C) A description of the methods used in subsection (b).**

*(Water Pollution Control Board; [327 IAC 19-14-5](#))***[327 IAC 19-14-6](#) Manure application setbacks****Authority:** [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)**Affected:** [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 6. (a) Except as otherwise provided under this section, application of manure and process wastewater must be in accordance with the setbacks in Table 1:

Table 1.**SETBACK DISTANCES FROM DOWNGRAIDENT SURFACE FEATURES (in feet)**

Known Feature	Liquid Incorporation	Solid Manure Surface Application	Liquid Manure Surface Application	
	All	All	Pasture and ≤ 6%	> 6%

			Residue Cover	Slope	Slope
Public Water Supply Well	500	500	500	500	500
Public Water Supply Intake Structure	500	500	500	500	500
Surface Waters of the State	50	50	100	100	200
Sinkholes (measured from the surficial opening or lowest point)	50	50	100	100	200
Wells	50	50	100	100	200
Drainage Inlet	50	50	100	100	200
Property Lines	50	50	50	50	50
Public Roads	50	50	50	50	50

(1) All setback distances must be measured from the edge of the area of actual placement of manure or process wastewater on the land.

(2) The property line setback distances specified in Table 1 may be waived in writing by the owner of the adjoining property.

(3) The setback is the width of the filter strip if a properly designed and maintained filter strip of at least thirty-five (35) feet in width is located between the application site and any of the following:

(A) Surface waters of the state.

(B) Any known private well.

(C) The surface opening or lowest point of any sinkhole.

(D) Any drainage inlet, including water and sediment control basins.

(4) The setback is ten (10) feet if a gradient barrier is located between the application site and any of the following:

(A) Surface waters of the state.

(B) Any known well.

(C) The surface opening or lowest point of any sinkhole.

(D) Any drainage inlet, including water and sediment control basins.

(b) Manure or process wastewater must not be applied to the land from manure application equipment operating on a public road.

(c) Manure and process wastewater shall not be applied to saturated ground.

(d) When planning land application, the owner or operator must take into account the:

(1) weather forecast and likelihood of precipitation events for the twenty-four (24) hour period before and after the application; and

(2) site soil conditions;

to assure that manure and process wastewater are not applied before a rain event that, when combined with soil conditions, would likely result in runoff.

(e) Land application sites must be inspected to identify any field tile outlets, grassed waterways, and surface water conveyance channels under or immediately bordering the land application site. Monitoring of identified field tile outlets, waterways, and surface water conveyance channels based on:

(1) color;

(2) flow;

(3) volume and volume change; and

(4) odor and change in odor;

must occur during and immediately following land application of the manure or process wastewater. If there is evidence of manure or process wastewater discharging from the field tile outlet, the land application must cease immediately and the flow stopped or captured. Any flow that is captured shall be either land applied or returned to an approved manure storage facility.

(f) The monitoring activities conducted in accordance with subsection (e) must be documented and placed in the operating record.

(Water Pollution Control Board; [327 IAC 19-14-6](#))

[327 IAC 19-14-7](#) Marketing and distribution of manure

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 7. (a) The owner/operator of the confined feeding operation shall provide an information sheet to any person that receives or purchases more than ten (10) cubic yards of dry manure or four thousand (4,000) gallons of liquid manure in a year from the confined feeding operation unless the owner/operator takes responsibility for applying the manure.

(b) The information sheet must contain, at a minimum, the following information:

- (1) The name and address of the confined feeding operation providing the manure.
- (2) A statement indicating that it is unlawful to allow the manure to enter any waters of the state.
- (3) Information on the nutrient content of the manure.
- (4) The manure application requirements of this rule.

(c) The operating record must contain and be maintained and updated with records of any person who receives or purchases more than ten (10) cubic yards of dry manure or four thousand (4,000) gallons of liquid manure in a year to include the following:

- (1) The name and address of the person receiving or purchasing the manure.
- (2) The amount of manure received or purchased by the person.
- (3) A copy of the information sheet.

(d) Anyone purchasing or receiving more than ten (10) cubic yards of dry manure or four thousand (4,000) gallons of liquid manure in a year must:

- (1) have a nutrient application certification; and
- (2) obtain all applicable certifications from the office of the state chemist.

(e) If a manure distribution program is used, IDEM may allow for a waiver of up to seventy-five percent (75%) of a facility's total land application acreage requirements if the documentation as described in subsections (b) and (c) from the previous two (2) years is submitted showing the operation has sold or distributed at least seventy-five percent (75%) of the manure produced at the facility.

(f) All records in this section must be made available to a representative of the department during an inspection.

(*Water Pollution Control Board*; [327 IAC 19-14-7](#))

Rule 15. Decommissioning of Manure Storage Facilities

[327 IAC 19-15-1](#) Applicability

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 1. The owner/operator of confined feeding operations that are subject to this article that plan to decommission a manure storage facility must comply with the requirements in section 2 of this rule. A manure storage facility is deemed decommissioned when the environmental threat has been removed.

(*Water Pollution Control Board*; [327 IAC 19-15-1](#))

[327 IAC 19-15-2](#) General requirements

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 2. (a) The owner/operator of a confined feeding operation that plans to decommission a manure storage facility shall do the following:

- (1) Decommission the manure storage facility in accordance with the requirements in this section prior to expiration of the approval.**
- (2) Continue to maintain the manure storage facility in accordance with the requirements of this article until the manure is removed.**
- (3) Have all the manure removed from the manure storage facility to the extent practical.**
- (4) Have the manure:**
 - (A) applied to the land in accordance with [327 IAC 19-14](#); or**
 - (B) managed in accordance with this article and applicable state and federal laws.**
- (5) Follow the requirements in the NRCS Conservation Practice Standard 360, "Closure of Waste Impoundments", as revised in February 2005, if applicable.**
- (6) Have all associated appurtenances and conveyance structures removed from uncovered manure storage facilities.**
- (7) Recalculate the storage capacity for the confined feeding operation.**
- (8) Notify the department:**
 - (A) before demolishing or converting the use of any manure storage facility; and**
 - (B) of the intended future use of the manure storage facility if the manure storage facility is to be converted to another use.**

(b) The owner/operator shall submit a certification to the commissioner within thirty (30) days of completing the requirements in this section that states compliance with the requirements in this section.

(c) If deemed necessary to protect human health or the environment, the commissioner may require additional decommissioning activities based on:

- (1) surface or ground water contamination;**
- (2) evidence of leakage, seepage, or spills; or**
- (3) other criteria related to protection of human health or the environment.**

(Water Pollution Control Board; [327 IAC 19-15-2](#))

Rule 16. Exiting the Confined Feeding Approval Program

[327 IAC 19-16-1](#) Applicability

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 1. This rule applies to any confined feeding operation owner/operator that wants to be removed from the program due to a:

- (1) reduction in the size of the confined feeding operation to a number of animals that is less than the definition of confined feeding operation in [327 IAC 19-2-5](#); or**
- (2) decision to cease operation and completely close the entire confined feeding operation.**

(Water Pollution Control Board; [327 IAC 19-16-1](#))

[327 IAC 19-16-2](#) Reduction in size of the operation

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 2. (a) A confined feeding operation may be removed from the regulated confined feeding approval program, but continue to operate as a smaller operation, if:

- (1) the department has received a request from the owner/operator to be removed from the program and confirming that the confined feeding operation has and maintains fewer animals than the**

definition of confined feeding operations in [327 IAC 19-2-5](#); and

(2) approved by the commissioner based on a review of the criteria in subsection (b).

(b) The commissioner shall review the following criteria in determining if a request to exit the confined feeding approval should be approved:

(1) The number of animals at the confined feeding operation.

(2) Past enforcement actions relative to any discharges and current compliance with any outstanding violations.

(3) Manure inventory.

(4) Appropriate decommissioning per the requirements in [327 IAC 19-15-2\(a\)](#) of any manure storage facilities that will no longer be used.

(5) Existence of any conditions that pose a threat to human health or the environment.

(c) The commissioner shall send the owner/operator a letter of confirmation when the department has verified that the requirements of subsection (a) have been met.

(d) For a confined feeding operation that has been removed from the confined feeding operation approval program under subsection (a), the owner/operator must submit a new application under this article to again operate a confined feeding operation as defined in [327 IAC 19-2-5](#).

(Water Pollution Control Board; [327 IAC 19-16-2](#))

[327 IAC 19-16-3](#) Closing the operation

Authority: [IC 13-14-8-7](#); [IC 13-15-2-1](#); [IC 13-18-10-4](#)

Affected: [IC 13-11-2](#); [IC 13-14](#); [IC 13-15](#); [IC 13-18](#); [IC 13-30](#)

Sec. 3. (a) A confined feeding operation may be removed from the regulated confined feeding approval program and completely closed if the department has been notified that:

(1) all livestock animals are removed from the site; and

(2) the confined feeding operation decommissioned all manure storage facilities in accordance with [327 IAC 19-15-2](#), including the removal of all manure.

(b) A CFO will not be allowed to exit the CFO program until all manure generated during the time the CFO was regulated has been disposed of or land applied in accordance with this article.

(c) The commissioner shall send the owner/operator a letter of confirmation when the department has verified that the requirements of subsection (a) have been met.

(Water Pollution Control Board; [327 IAC 19-16-3](#))

SECTION 2. [327 IAC 16](#) IS REPEALED.

[Notice of Public Hearing](#)

Posted: 08/11/2010 by Legislative Services Agency

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